

**U.S. ARMY CORPS OF ENGINEERS  
CIVIL WORKS PROGRAM**

**CONGRESSIONAL SUBMISSION  
FISCAL YEAR 2003**

**NORTH ATLANTIC DIVISION**

*Budgetary information will not be released  
outside the Department of the Army until  
4 February 2002*

Justification of Estimate for Civil Functions Activities  
Department of the Army, Corps of Engineers  
Fiscal Year 2003

NORTH ATLANTIC DIVISION

Corps of Engineers

Table of Contents

	<u>Page</u>
<u>Surveys:</u> .....	2
Anacostia River and Tributaries, Prince George's County Levee, Maryland and D.C. ....	8
Ausable River Basin, New York .....	15
Blackstone River Watershed Restoration, Massachusetts and Rhode Island .....	40
Bloomsburg, Pennsylvania .....	20
Boquet River Basin, New York .....	16
Boston Harbor, Massachusetts .....	2
Bronx River Basin, New York .....	17
Chesapeake Bay Shoreline Erosion, Maryland, Virginia, and Pennsylvania .....	22
Christina River Watershed, Delaware, Pennsylvania, and Maryland .....	34
Coastal Massachusetts Ecosystem Restoration Massachusetts and Cape Cod Bays, MA .....	41
Connecticut River Ecosystem Restoration, New Hampshire and Vermont .....	43
Delaware River Basin Comprehensive, New York, New Jersey, Delaware and Pennsylvania ...	62
Eastern Shore, Maryland .....	36
Flushing Bay and Creek, New York .....	48
Fourmile Run, Virginia .....	21
Freeport Creek, Village of Freeport, New York .....	18
Hudson-Raritan Estuary, New York and New Jersey .....	49
Hudson-Raritan Estuary, Gowanus Canal, New York .....	50
Hudson-Raritan Estuary, Lower Passaic River, New Jersey .....	44
Jamaica Bay, Marine Park and Plumb Beach, Arverne, New York .....	28
Jamaica Bay, Marine Park and Plumb Beach, New York .....	29
Lake Montauk Harbor, New York .....	4
Lindenhurst, New York .....	19
Lower Passaic River, New Jersey .....	45
Lower Potomac Estuary Watershed, St. Mary's Watershed, Maryland .....	38
Lower Rappahannock River, Virginia .....	58
Lynnhaven River Basin, Virginia .....	59
Merrimack River Basin, New Hampshire and Massachusetts .....	60
Middle Potomac River Watershed, MD, VA, PA, WV, and D.C. ....	39
New Jersey Shoreline, Alternative Long-Term Nourishment Study, New Jersey .....	23
New Jersey Shore Protection, Hereford Inlet to Cape May Inlet, New Jersey .....	24

Survey: (Cont'd)

Page

New York Harbor Anchorage Areas, New York .....	5
Norfolk Harbor and Channels, Craney Island, Virginia .....	7
North Shore of Long Island, Asharoken, New York .....	31
North Shore of Long Island, Bayville, New York .....	32
Peckman River Basin, New Jersey .....	46
Quonset Davisville Port, Rhode Island .....	6
Rahway River Basin, New Jersey .....	12
Raritan Bay and Sandy Hook Bay, Highlands, New Jersey .....	25
Raritan Bay and Sandy Hook Bay, Keyport, New Jersey .....	26
Raritan Bay and Sandy Hook Bay, Leonardo, New Jersey .....	27
Rhode Island Ecosystem Restoration, Rhode Island .....	56
Saw Mill River Basin, New York .....	51
Schuylkill River Basin, Wissahickon, Pennsylvania .....	55
Shrewsbury River and Tributaries, New Jersey .....	10
Somerset and Searburg Dams, Deerfield River, Massachusetts and Vermont .....	42
South Shore of Long Island, New York .....	52
South Shore of Staten Island, New York .....	33
Stony Brook - Millstone River Basin, New Jersey .....	47
Upper Delaware River Watershed, New York .....	53
Upper Rockaway River, New Jersey .....	11
Upper Susquehanna River Basin, New York, and Pennsylvania .....	54
Woodbridge River Basin, New Jersey .....	14

Preconstruction Engineering and Design:..... 64

Atlantic Intracoastal Waterway Bridge at Deep Creek, Virginia .....	73
Baltimore Metropolitan Water Resources, Gwynns Falls, Maryland .....	66
Delaware Coast from Cape Henlopen to Fenwick Island, Fenwick Island, Delaware .....	77
Elizabeth River Basin, Environmental Restoration, Hampton Roads, Virginia .....	71
Great Egg Harbor Inlet to Townsends Inlet, New Jersey .....	79
Hudson River Habitat Restoration, Combined Sites, New York .....	69
James River, Virginia .....	75
Manasquan Inlet to Barnegat Inlet, New Jersey .....	81
Muddy River, Brookline and Boston, Massachusetts .....	68
Passaic River, Harrison, New Jersey .....	84
Raritan Bay and Sandy Hook Bay, Port Monmouth, New Jersey .....	82
Raritan Bay and Sandy Hook Bay, Union Beach, New Jersey .....	83
South River, Raritan River Basin, New Jersey .....	86
Smith Island Environmental Restoration, Maryland .....	67
Upper Passaic River, Long Hill Township, New Jersey .....	64

<u>Construction, General:</u> .....	88
Assateague Island, Maryland .....	129
Atlantic Intracoastal Waterway Bridge at Great Bridge, Virginia .....	103
Atlantic Coast of Maryland, Maryland .....	133
Atlantic Coast of New York City, Rockaway Inlet to Norton Point, Coney Island, NY .....	172
Baltimore Harbor Anchorages and Channels, Maryland .....	88
Brigantine Inlet to Great Egg Harbor Inlet, New Jersey (Absecon Island) .....	138
Cape Cod Canal Railroad Bridge, Massachusetts .....	234
Cape May Inlet to Lower Township, New Jersey .....	142
Chesapeake Bay Oyster Recovery, Maryland and Virginia .....	226
Delaware Bay Coastline, Roosevelt Inlet to Lewes Beach, Delaware .....	115
Delaware Coast Protection, Delaware .....	120
Delaware Coast, Rehoboth Beach to Dewey Beach, Delaware .....	125
Delaware River Main Channel, Deepening, New Jersey, Pennsylvania, Delaware .....	92
East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, New York .....	178
Fire Island Inlet to Jones Inlet, New York .....	183
Fire Island Inlet to Montauk Point, New York .....	188
Great Egg Harbor Inlet and Peck Beach, New Jersey .....	148
Lackawanna River, Olyphant, Pennsylvania .....	216
Lower Cape May Meadows, Cape May Point, New Jersey .....	153
New York and New Jersey Harbor, New York and New Jersey .....	96
Norfolk Harbor and Channels (Deepening), Virginia .....	107
Passaic River Preservation of Natural Storage Areas, New Jersey .....	199
Poplar Island, Maryland .....	230
Ramapo and Mahwah Rivers, Mahwah, New Jersey and Suffern, New York .....	203
Ramapo River at Oakland, New Jersey .....	207
Raritan Bay and Sandy Hook Bay, New Jersey .....	157
Raritan River Basin, Green Brook Sub-Basin, New Jersey .....	212
Sandy Hook to Barnegat Inlet, New Jersey .....	162
Townsend's Inlet to Cape May Inlet, New Jersey .....	168
Virginia Beach, Virginia (Hurricane Protection) .....	194
West Hill Dam, Massachusetts .....	238
Wyoming Valley, Pennsylvania (Levee Raising) .....	220
 <u>Operation and Maintenance, General:</u> .....	 230

Justification of Estimate for Civil Function Activities  
Department of the Army, Corps of Engineers  
Fiscal Year 2003

**SUMMARY, NORTH ATLANTIC DIVISION**

	<u>FY 2002 Allocation</u> \$	<u>FY 2003 Request</u> \$	Increase or <u>Decrease</u> \$
<b><u>General Investigations</u></b>			
Surveys	9,233,000	8,413,000	- 820,000
Preconstruction Engineering and Design	3,654,000	2,726,000	- 928,000
Subtotal General Investigations	(12,887,000)	(11,139,000)	(-1,748,000)
<b><u>Construction, General</u></b>			
Construction	205,712,000	212,599,000	6,887,000
Major Rehabilitation	10,502,000	8,500,000	-2,002,000
Dam Safety Assurance	7,562,000	2,800,000	-4,762,000
Subtotal Construction, General	(223,776,000)	(223,899,000)	(123,000)
<b><u>Operation and Maintenance, General</u></b>			
Project Operation	58,411,000	63,337,000	4,926,000
Project Maintenance	145,631,000	143,217,000	-2,414,000
Subtotal Operation and Maintenance	(204,042,000) -----	(206,554,000) -----	(2,512,000) -----
<b>GRAND TOTAL, NORTH ATLANTIC DIVISION</b>	440,705,000	441,592,000	887,000

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

1. SURVEYS - NEW: None.

2. SURVEYS - CONTINUING

a. Navigation Studies: The amount of \$1,131,000 is requested in fiscal year 2003 to continue three navigation studies and complete two navigation studies

MASSACHUSETTS

Boston Harbor	1,786,000	174,000	225,000	362,000	1,025,000
New England District					

Boston Harbor is located along the eastern shoreline of Massachusetts and is New England's largest port serving as the principal distribution point for the commerce of Massachusetts, New Hampshire and Vermont. In 1996, waterborne commerce totaled 20.1 million tons, of which approximately 79 percent were liquid petroleum products. The inner harbor has been extensively developed for water transportation and is comprised of the Main Ship, Reserved, Chelsea River and Mystic River Channels. The Massachusetts Port Authority (Massport) has been upgrading facilities at Conley Terminal, which is located along the southerly side of the Reserved Channel, to accommodate larger vessels and improve operational efficiency of the harbor. In addition, Massport has plans to expand Conley Terminal onto the adjacent Coastal Oil Terminal property and to develop a bulk cargo terminal at nearby North Jetty Terminal, increasing the number of berths that would benefit from deeper channels. The Port of Boston Competitiveness Task Force Report, dated December 1998, concluded that the channels accessing Conley Terminal must be dredged to at least 45 feet for New England companies to remain competitive by receiving containerized cargo by direct ocean going service. This becomes increasingly important as the next generation of container ships, drawing 45 feet or more, come into service. Navigation improvements to deepen portions of Boston Harbor to at least 45 feet would increase the efficiency of harbor operations and reduce tidal delays for larger vessels. Massport, who currently is the non-Federal sponsor for the 40-foot deepening project, is aware of the cost sharing requirements for the feasibility study. The feasibility cost-sharing agreement is scheduled for execution in April 2002.

The reconnaissance report, certified in August 2001, recommended feasibility phase studies to evaluate deepening the Main Ship, Reserved, and Entrance Channels to 45 feet. Fiscal Year 2002 funds will be used to initiate the feasibility phase, including sediment sampling and testing and remote surveys for geotechnical and cultural resources scoping. Funds requested for Fiscal Year 2003 will be used to continue the feasibility phase, including biological sampling and testing, economic analysis and channel design. The estimated cost of the feasibility phase is \$3,400,000, which is to

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Boston Harbor  
New England District

be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,486,000
Reconnaissance Phase (Federal)	86,000
Feasibility Phase (Federal)	1,700,000
Feasibility Phase (Non-Federal)	1,700,000

The reconnaissance phase is scheduled for completion in April 2002. The feasibility study is scheduled for completion in September 2005.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
NEW YORK					
Lake Montauk Harbor New York District	1,400,000	575,000	252,000	30,000	543,000

Lake Montauk Harbor, located about 120 miles east of the Battery New York City, is on the south fork of Long Island in the Town of East Hampton, Suffolk County, New York. It is the only harbor of refuge for nearly 50 miles in this area.

The existing Federal project provides a channel 12-foot deep at mean low water, 150 feet wide for an approximate length of 3700 feet; a boat basin 10 feet deep, 400 feet wide for an approximate length of 900 feet; and two jetties with sport fishing facilities. Local interests maintain that the authorized 12-foot project is inadequate for current commercial vessels forcing some deeper draft vessels to wait for higher tides in order to pass safely through the channel. In addition, deterioration of the eastern jetty is allowing sand to migrate into the authorized channel increasing Federal maintenance costs.

A reconnaissance report, completed in May 1995, determined that there is federal interest to proceed to the feasibility phase of study and recommended further studies of a \$4,900,000 project to deepen the existing channel and provide shoreline protection through beneficial use of the dredged material and sand bypassing. In addition, environmental restoration opportunities at two sites were identified. The feasibility study will evaluate alternative plans to determine the national economic development plan for the project. The New York State Department of Environmental Conservation is the potential local sponsor for the feasibility study and fully understands the cost sharing requirements for the feasibility phase of the study. The feasibility cost-sharing agreement is scheduled for execution in July 2002.

If the Section 905 (b) analysis is certified to be in accord with policy, the fiscal year 2002 funds, along with prior appropriated funds, will be used to initiate the feasibility phase of the study, including data collection and problem identification. The funds requested for fiscal year 2003 will be used to continue the feasibility phase of the study, including economic, hydraulic, and environmental analyses to establish baseline conditions to develop alternative project plans. The preliminary cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,425,000
Reconnaissance Phase (Federal)	400,000
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (non-Federal)	1,000,000

The reconnaissance phase is scheduled for completion in July 2002. The feasibility study is scheduled for completion in April 2007.



## APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
New York Harbor Anchorage Areas New York District	1,300,000	810,000	126,000	364,000	0

The New York Harbor Anchorage Areas, a part of the New York Harbor and Adjacent Channels Project, includes three separate anchorage areas with current depths ranging from 10 to 45 feet below mean low water. The reconnaissance report recommended anchorage improvements for Red Hook Flats and Gravesend Bay at a cost of \$56,000,000. Local interests desire that one of these areas, the Red Hook Flats, be considered for navigation improvements. The Red Hook Flats anchorage area is located west of Red Hook and Bay Ridge, Brooklyn, New York, and is approximately 3.6 miles long, 2,640 feet wide, and 35 to 45 feet deep. The major problem in the area is overcrowding in the anchorage as well as in navigation channels, caused by increasing vessel size, lack of space and, insufficient depth. The current design of the Red Hook Flats anchorage area was based primarily on vessels having a draft of 35 feet and a length of 525 feet. Recent investigations verify that there is a significant increase in vessels with drafts of 40 to 46 feet and lengths of approximately 1,000 feet. Thus, the existing anchorage areas can accommodate fewer ships. The feasibility study will investigate potential improvements that would reduce the risk of collisions and groundings, including resultant petroleum spills. The feasibility cost-sharing agreement was executed in July 2000 with the Port Authority of New York and New Jersey.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study, including the economic analysis, public meetings, and engineering and environmental data gathering. The funds requested for fiscal year 2003 will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is \$1,600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,100,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	800,000
Feasibility Phase (Non-Federal)	800,000

The reconnaissance phase was completed in July 2000. The feasibility study is scheduled for completion in June 2003.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

RHODE ISLAND

Quonset Davisville Port New England District	1,640,000	140,000	94,000	25,000	1,381,000
---	-----------	---------	--------	--------	-----------

The Quonset Davisville port is located along the southwestern shore of Narragansett Bay about 20 miles south of Providence, Rhode Island, at the former Naval Construction Battalion Center. The Quonset Point and Davisville sections of the port are located on the southern and northern sides of the airfield, within the former Naval facility, respectively. Several shipbuilding and marine construction interests, including General Dynamics, which fabricates Naval submarine hull components, are using the Quonset Point piers. The Davisville piers are being used for shipping frozen foods and importing automobiles from Asia and Europe. The Rhode Island Economic Development Corporation (RIEDC), a State agency, manages the port facilities. RIEDC has plans to redevelop the Quonset and Davisville port facilities for larger containerships and bulk carriers and has acquired the Maritime Administration section of the port. RIEDC is also upgrading rail and highway access to the port.

The reconnaissance study found there is a Federal interest for further feasibility studies to deepen the former naval channels in Quonset Davisville port. The 35-foot former channel and turning basin at Quonset Point would be deepened to 45 feet. The current Davisville channel depth limits commercial vessels forcing some deeper draft vessels to wait for higher tides. The channel and turning basin in the Davisville section would be deepened to 35 feet. RIEDC is empowered to act as the non-Federal sponsor by the State of Rhode Island and understands the cost sharing requirements for the feasibility phase of the study. The feasibility cost sharing agreement is scheduled for execution in August 2002.

Fiscal Year 2002 funds will be used to initiate the feasibility phase of the study, including public coordination for the environmental impact statement. Funds requested for fiscal year 2003 will be used to continue the feasibility phase, including data collection and environmental analyses. The preliminary estimated cost of the feasibility phase is \$3,000,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,140,000
Reconnaissance Phase (Federal)	140,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The reconnaissance phase is scheduled for completion in August 2002. The feasibility study is scheduled for completion in September 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Norfolk Harbor and Channels, Craney Island Norfolk District	3,050,000	2,104,000	596,000	350,000	0

The Craney Island Dredged Material Management Area (CIDMMA) is a 2,500-acre man-made containment area located along the south bank of the James River in Portsmouth, Virginia. It was authorized by the River and Harbor Act of 1946 and constructed from 1956 through 1958. Craney Island is Federally owned and operated and is used by private interests, local municipalities, and Federal and Commonwealth Government agencies for disposal of dredged material from Norfolk Harbor and adjacent waterways. The main containment site consists of a diked area with six spillways. There is also a rehandling basin to the southeast of the containment area that is used by bottom-dump scows and other vessels that do not have pump-out capabilities. About every two years, the rehandling basin reaches its capacity. This material is then hydraulically dredged and pumped into the containment area. The containment area, divided into three cells, is part of a management plan for the effective operation of the area. The Virginia Port Authority, an agency of the Commonwealth of Virginia, has expressed interest to create a fourth cell at the CIDMMA by expanding the containment area to the east. The new cell will extend the useful life of the CIDMMA and provide an area that could be developed as a long-term berthing and port facility adjacent to the Norfolk Harbor Channel. The Virginia Port Authority and maritime officials state that additional port facilities are needed based on increased vessel traffic projections through 2010-2015. In addition, the Commonwealth of Virginia has formed a Craney Island Study Committee to address issues regarding the future use and development of the CIDMMA. The Virginia Port Authority is the non-Federal sponsor and executed the feasibility cost-sharing agreement in April 1999.

Fiscal Year 2002 funds will be used to continue the feasibility phase of study, including preparation of the project study plan; and engineering, economic, cultural, environmental, and real estate investigations. Fiscal Year 2003 funds will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is \$5,900,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$6,000,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,950,000
Feasibility Phase (Non-Federal)	2,950,000

The reconnaissance phase was completed in April 1999. The feasibility study is scheduled for completion in May 2003.

Subtotal Navigation Studies Continuing	9,176,000	3,803,000	1,293,000	1,131,000	2,949,000
---	-----------	-----------	-----------	-----------	-----------

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

2. SURVEYS - CONTINUING

- b. Flood Damage Prevention Studies: The amount of \$1,369,000 is requested in fiscal year 2003 to continue 11 flood damage prevention studies and complete one flood damage prevention study.

MARYLAND

Anacostia River and Tributaries, Prince George's County Levee, MD & DC Baltimore District	1,453,000	1,067,000	101,000	248,000	37,000
---	-----------	-----------	---------	---------	--------

The Anacostia River has a total drainage area of 170 square miles, of which 136 square miles are in Maryland, and 34 square miles are in the District of Columbia. The Northeast and Northwest Branches originate in Maryland and flow through several highly urbanized areas before forming the Anacostia River about nine miles upstream from its junction with the Potomac River. The Corps of Engineers' involvement in the basin dates back more than 115 years and includes projects and programs for navigation, flood control, debris removal, and aquatic vegetation control. Two major projects were undertaken. From 1902 through 1940, the District of Columbia portion of the river was channelized, seawalls were built, Kingman Lake and East Lake were constructed, and more than 1,000 acres of mudflats and wetlands were filled with dredged material. The primary purpose of this work was to provide a park for the eastern portion of the city. From 1952 to 1959, a flood control project was constructed in Prince George's County, Maryland, along the Northeast and Northwest Branches, and the Anacostia River. A total of 28,000 feet of levees and 14,000 feet of channels were constructed to solve critical flood problems. This effort was successful; however, the construction resulted in a further loss of wetlands and fish and wildlife habitat. A reconnaissance study for the Anacostia River and Tributaries, completed in December 1991, identified extensive potential Federal involvement in the Anacostia watershed restoration effort. This reconnaissance study recommended that additional feasibility studies be conducted at numerous sites in the Anacostia area. Prince George's County Levee is the third feasibility study from the reconnaissance effort, and will investigate improving the existing local flood protection levee in Prince George's County and restoring the environment through wetland creation and restoration. According to a recent County study, the levees do not currently provide 100-year level of protection under existing conditions nor do they have the required 3-foot freeboard above the 100-year flood elevation. The non-Federal sponsors for this third study are Prince George's County and the Maryland-National Capital Park and Planning Commission. The feasibility cost-sharing agreement was executed in January 1999.

Fiscal Year 2002 funds are being used to continue the feasibility phase, including plan formulation and continue coordination with resource agencies and the public. The funds requested for fiscal year 2003 will be used to continue the feasibility phase, including final plan formulation and preparation of the draft feasibility report. The estimated

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Anacostia River and Tributaries,  
Prince George's County Levee, MD & DC  
Baltimore District

cost of the feasibility phase is \$2,706,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,806,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,353,000
Feasibility Phase (Non-Federal)	1,353,000

The reconnaissance phase for the Prince George's County Levee area was completed in January 1999. The Prince George's County Levee feasibility study is scheduled for completion in March 2004.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

NEW JERSEY

Shrewsbury River and Tributaries New York District	1,900,000	190,000	157,000	100,000	1,453,000
---	-----------	---------	---------	---------	-----------

The Shrewsbury River and its tributaries flow north-northeast in Monmouth County, New Jersey, and the river is a tidal estuary protected by the Sandy Hook peninsula and nearby barrier beaches. The river system drains into the Raritan and Sandy Hook Bays and is located about 35 miles southwest of the battery New York City. The area is suburban with several heavily populated towns along the Shrewsbury River and its tributaries.

Frequent flooding occurs along the Shrewsbury River and its tributaries in Monmouth County, New Jersey. The flooding is due to storm surges caused by hurricanes and northeasters that produce high tides that back up the normal river flow. A major storm occurred in December 1992, causing damage to residential, commercial, and municipal properties in Monmouth Beach with water levels reaching above the main floor levels in many structures. Structures in other towns, such as the Township of Seabright, along the river were similarly affected. In October 1996, the area was again flooded during a northeaster. In addition, degraded wetlands exist along the Shrewsbury River and its tributaries.

The reconnaissance study, completed in August 2001, found there is a Federal interest to proceed to the feasibility phase of the study. The feasibility phase will develop potential flood control solutions in the Boroughs of Sea Bright and Monmouth Beach, New Jersey such as installing bulkheads along the Shrewsbury River. The feasibility study will identify opportunities for environmental restoration, particularly along the islands in the Shrewsbury River, the Navesink delta, and Little Silver Creek. The New Jersey Department of Environmental Protection is the non-Federal sponsor who understands the cost-sharing requirements for the feasibility phase of the study. The feasibility cost sharing agreement was executed in August 2001.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions and formulate alternatives. The funds requested for fiscal year 2003 will be used to continue the feasibility phase of the study, including additional data gathering and analysis, screening of alternatives plan formulation and environmental scoping efforts. The preliminary estimated cost of the feasibility phase is \$3,600,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,700,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,800,000
Feasibility Phase (Non-Federal)	1,800,000

The reconnaissance phase was completed in August 2001. The feasibility study is scheduled for completion in September 2007.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Upper Rockaway River New York District	1,400,000	581,000	126,000	300,000	393,000

The Upper Rockaway River is located in Morris County, New Jersey, and is a tributary to the Passaic River draining an approximate 116 square mile area. Several Morris County townships are susceptible to flooding, including Jefferson, Wharton, Dover, Denville, and Boonton. These townships have combined population of about 100,000 people. In the townships of Denville and Boonton alone about 1,000 structures are subject to flooding.

Major flooding occurred in May 1968, September 1971, February and December 1973, March 1977, January 1979, April 1984 and September 1999 along the Upper Rockaway River. Downstream of Dover, flooding damaged many homes, commercial businesses, roads and bridges. The flooding is from low capacity in the river caused by siltation. In addition, recent stream bank erosion in the river has further increased the river's siltation problems. Local interests have attempted to remove the sediment build-up from the river but were unsuccessful. The October 1996 storm flooded about 200 homes and businesses. In the Township of Denville, many roads were under a foot of water or more. Several bridges, including Savage Road Bridge and Diamond Spring Road Bridge, were washed out and had to be repaired after the flood. In the Township of Boonton, water levels were several feet above the first floor of many residential properties and residents of six homes had to be evacuated. The upstream areas of the Rockaway River are being evaluated for environmental restoration including creation of new wetland sites. The feasibility study will develop plans to alleviate flood problems and develop opportunities for environmental restoration. The feasibility cost-sharing agreement was executed on May 27, 1999 with the State of New Jersey Department of Environmental Protection.

Fiscal Year 2002 funds are being used to continue feasibility phase of the study, including design alternatives, environmental assessments, and public involvement and local coordination. Fiscal Year 2003 funds will be used to continue the feasibility phase of the study, including preparation of the draft feasibility report. The estimated cost of the feasibility phase is \$2,600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,700,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,300,000
Feasibility Phase (Non-Federal)	1,300,000

The reconnaissance phase was completed in May 1999. The feasibility study is scheduled for completion in March 2004.

## APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Rahway River Basin New York District	3,280,000	190,000	145,000	100,000	2,845,000

The study area encompasses the Rahway River basin located in northeastern New Jersey about 15 miles west of the Battery New York City. The basin is 81.9 square miles flowing southerly through Essex and Union Counties, then easterly through Union and Middlesex Counties from the City of Rahway discharging into the Arthur Kill near Carteret, New Jersey. The area is entirely developed and is urban to suburban in nature.

Frequent flooding occurs along the Rahway River in Essex, Union, and Middlesex Counties. Flooding problems from fluvial and tidal storm surges have worsened due to extensive development in the area. Major storms of record occurred in July 1938, May 1968 (10 year flood), August 1971 (15 year flood), August 1973 (60 year flood), July 1975 (50 year flood), June 1992 (15 year flood), October 1996 (75 year flood), July 1997 (50 year flood), and most recently September 1999 Hurricane Floyd (500 year flood). Major damage centers include Springfield, Cranford, Rahway, Maplewood, and Millburn. In addition to the flooding problems, ecologic problems exist that include loss and degradation of tidal wetlands, pollution and sedimentation problems. Many denuded mud flats exist where phragmites has replaced spartina as the dominant plant. Numerous petroleum facilities align the Rahway River in the vicinity of its confluence with the Arthur Kill. Past sediment analyses have shown that petroleum products and heavy metals are prevalent downstream of the river.

The reconnaissance report, completed in July 1999, found there is a Federal interest to proceed to the feasibility phase of the study and recommended further studies for structural solutions such as channel improvements, diversion tunnels and detention ponds along the South Branch of the Rahway River, and levees and floodwalls along the Robinson's Branch of the Rahway River. Ecosystem restoration for streambank and wetlands restoration were recommended along the Rahway River in the City of Rahway and the Town of Cranford. The New Jersey Department of Environmental Protection is the non-Federal potential sponsor who understands the cost-sharing requirements for the feasibility phase of the study. The feasibility cost sharing agreement is scheduled for execution in April 2002.

If the Section 905 (b) analysis is certified to be in accord with policy, the fiscal year 2002 funds, along with prior appropriated funds, will be used to initiate the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions and formulate alternatives. The funds requested for fiscal year 2003 will be used to continue the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions and formulate alternatives.



APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Rahway River Basin  
New York District

The preliminary estimated cost of the feasibility phase is \$6,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$6,480,000
Reconnaissance	80,000
Feasibility Phase (Federal)	3,200,000
Feasibility Phase (Non-Federal)	3,200,000

The reconnaissance phase is scheduled for completion in April 2002. The feasibility study is scheduled for completion in April 2011.

## APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Woodbridge River Basin New York District	1,730,000	191,000	157,000	100,000	1,282,000

The study area encompasses the Woodbridge River Basin located in northeastern New Jersey about 18 miles southwest of the Battery New York City. The 5 miles long Woodbridge River flow easterly through Middlesex County, New Jersey, and discharges into the Arthur Kill. The area is entirely developed and is suburban and industrial in nature.

Frequent flooding occurs along the Woodbridge River in Middlesex County. Flooding problems from fluvial and tidal storm surges have worsened due to extensive development in the area. Major storms of record occurred in July 1938, May 1968 (10 year flood), August 1971 (15 year flood), August 1973 (60 year flood), July 1975 (50 year flood), June 1992 (15 year flood), October 1996 (75 year flood), July 1997 (50 year flood), and most recently September 1999 Hurricane Floyd (500 year flood). Major damage centers includes the Sewaren section of Woodbridge Township and Perth Amboy. In addition to the flooding problems, ecologic problems exist that include loss and degradation of tidal wetlands, pollution and sedimentation problems. Many denuded mud flats exist where phragmites has replaced spartina as the dominant plant. Petroleum facilities align the Woodbridge River in the vicinity of its confluence with the Arthur Kill. Past sediment analyses have shown that petroleum products and heavy metals are prevalent downstream of the river.

The reconnaissance report, certified in July 1999, found there is a Federal interest to proceed to the feasibility phase of the study and recommended non-structural solutions such as buyouts and structural measures such as levees, floodwalls and streambank modifications in the Township of Woodbridge. Ecosystem restoration such as streambank stabilization and wetlands creation along the Woodbridge River will also be studied in the feasibility phase. The New Jersey Department of Environmental Protection is the non-Federal sponsor who understands the cost-sharing requirements for the feasibility phase of the study. The feasibility cost-sharing agreement is scheduled for execution in April 2002.

Fiscal year 2002 funds, along with prior appropriated funds, will be used to initiate the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions and formulate alternatives. The funds requested for fiscal year 2003 will be used to continue the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions and formulate alternatives. The preliminary estimated cost of the feasibility phase is \$3,300,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interest. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,380,000
Reconnaissance Phase	80,000
Feasibility Phase (Federal)	1,650,000
Feasibility Phase (Non-Federal)	1,650,000

The reconnaissance phase is scheduled for completion in April 2002. The feasibility study is scheduled for completion in April 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
NEW YORK					
Ausable River Basin New York District	800,000	125,000	31,000	50,000	594,000

The study area encompasses the entire 450 square mile Ausable River Basin located in northeastern New York. Flooding occurred in February 1976, March 1978, November 1979, December 1983, October 1985, November 1996 and January 1996 along the Ausable River and its tributaries in Essex and Clinton Counties. The river and its tributaries carry large amounts of sediment that are deposited in the lower reaches at river bends and bridges which leads to flooding during high flow events. Ice jam flooding also occurs during winter causing backwater flood conditions in surrounding areas. Major damage centers are at Ausable Forks, Upper Jay, Keeseville, Keene, and Keene Valley. Clinton and Essex Counties sustained some \$20 million in flood damages in November 1996 and were declared Federal Disaster Areas. In Keeseville, flooding would damage a 40-foot high by 1,400-foot long bedrock embankment that protects a portion of the town's business district. In addition, other towns are cut off when the main roads become impassable during storm events and further restrict residents from receiving emergency services. Clinton and Essex flooding in January 1996 and a sudden mid-winter thaw caused delays in emergency evacuation efforts as rising rivers again inundated bridges and roadways.

The reconnaissance report, certified in January 1999, found there is a Federal interest to proceed to the feasibility phase of the study and recommended further studies for potential flood damage prevention measures such as levees, floodwalls, roadway raisings, and ice retention structures in the Towns of Jay, Keene, and Keeseville, New York, as well as ecosystem opportunities in the Towns of Chesterfield, Jay, and Keene, New York. In a letter dated 27 May 1997, the New York State Department of Environmental Conservation expressed interest in becoming the non-Federal sponsor and their willingness to share equally in the feasibility phase cost. The feasibility cost-sharing agreement is scheduled to be executed in August 2002.

Prior appropriated funds are being used to complete the reconnaissance phase at full Federal expense. Fiscal year 2002 funds, along with prior appropriated funds, will be used to initiate the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions and formulate alternatives. The funds requested for fiscal year 2003 will be used to continue the feasibility phase study, including data collection, economic, hydraulic and environmental analyses necessary to establish baseline conditions and formulate alternatives. The preliminary estimated cost of the feasibility phase is \$1,400,000, which is shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,500,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	700,000
Feasibility Phase (Non-Federal)	700,000

The reconnaissance phase is scheduled for completion in August 2002. The feasibility study is scheduled to be completed July 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Boquet River Basin New York District	800,000	128,000	31,000	50,000	591,000

The Boquet River and its tributaries flow northeast through Essex County, New York, draining an approximately 95 square mile watershed. Frequent flooding occurs along the Boquet River and its tributaries in Essex County, New York. The river and its tributaries carry large amounts of sediment that are deposited in the lower reaches at river bends and bridges which leads to flooding during high flow events. Ice jam flooding also occurs during winter causing backwater flood conditions in surrounding areas. Essex County's main roads become impassable during storm events and further restrict residents from receiving emergency services. Major damage centers are Elizabethtown, New York and areas along New York State Route 9. Flood damages include basement and first floor flooding in commercial and residential structures, loss of bridges and deterioration of roads, and excessive stream bank erosion. Essex County sustained some \$10 million in flood damages in November 1996 and was declared a Federal Disaster Area. Flooding in Elizabethtown, damaged some 25 structures when water levels reached two feet above first floor elevations. In addition, several main bridges were damaged beyond repair and road washouts occurred due to high waters and stream bank erosion. A New York State Hydro-Plant was closed for several months to make needed repairs. Five deaths occurred near Elizabethtown in November 1979 when drivers tried to cross an inundated bridge. Another area that has experienced flooding is the Hamlet of Whallonsburg where flood levels have reached up to 15 feet in the past.

The reconnaissance report, certified in December 1998, recommended further feasibility studies for potential flood damage prevention measures, such as levees, floodwalls, roadway raising, ice retention structures, and sedimentation basins, as well as ecosystem opportunities, in Elizabethtown, and the Towns of Lewis and Westport, New York. By letter dated 27 May 1997, the New York State Department of Environmental Conservation expressed interest in becoming the non-Federal sponsor and expressed their willingness to share equally in the feasibility phase of the study. The feasibility cost-sharing agreement is scheduled for execution in August 2002.

Prior appropriated funds are being used to complete the reconnaissance phase at full Federal expense. Fiscal Year 2002 funds, along with prior appropriated funds for the feasibility study, will be used to initiate the feasibility phase of the study, including data collection, economic and environmental analyses. The funds requested for fiscal year 2003 will be used to continue the feasibility phase study, including data collection, economic and environmental analyses. The preliminary estimated cost of the feasibility phase is \$1,400,000, which is shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,500,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	700,000
Feasibility Phase (Non-Federal)	700,000

The reconnaissance phase is scheduled for completion in August 2002. The feasibility study is scheduled for completion in July 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Bronx River Basin New York District	194,000	800,000	387,000	189,000	30,000

The study area for the Bronx River Basin is located in central Bronx County and lower Westchester County, New York, draining an approximate 56.4 square mile watershed. The river and its tributaries carry large amounts of sediment that are deposited in the lower reaches at river bends and bridges which leads to flooding during high flow events in Bronx and Westchester Counties. Major damage centers include the Towns of North Castle, Scarsdale, Mount Pleasant, and Greenburgh; and the Cities of Yonkers, White Plains, and Mount Vernon. In addition to flooding problems, environmental degradation of the Bronx River affects the water quality and fish and wildlife habitats of the watershed.

The reconnaissance study, certified in January 2000, found there is a Federal interest to proceed to the feasibility phase and recommended further studies for potential flood damage prevention measures, ecosystem restoration opportunities for 18 sites along the Bronx River, and recommended a comprehensive basin-wide watershed plan to identifying non-structural measures for ecosystem restoration. The potential local sponsor is the New York State Department of Environmental Conservation, who fully understands the cost-sharing requirements for the feasibility phase of the study. The feasibility cost-sharing agreement is scheduled for execution in August 2002.

Fiscal Year 2002 funds, along with prior appropriated funds for the feasibility phase of the study, will be used to initiate the feasibility study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions. The funds requested for fiscal year 2003 will be used to continue the feasibility phase of the study, including formulation of alternatives. The preliminary estimated cost of the feasibility study is \$1,400,000 to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,500,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	700,000
Feasibility Phase (Non-Federal)	700,000

The reconnaissance phase is scheduled for completion in August 2002. The feasibility study is scheduled for completion in June 2004.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Freeport Creek, Village of Freeport New York District	1,600,000	100,000	47,000	100,000	1,353,000

The study area includes Freeport Creek and its tributaries in the Village of Freeport, New York, which is located on the south shore of Long Island approximately 20 miles east of the Battery New York City. The area is urban to suburban with over 1700 residential and commercial structures that are subject to flooding from storm events, such as northeastern storms and hurricanes, and the remaining tidal ecosystem along the waterfront area has suffered environmental degradation from over development and erosion.

The reconnaissance study, completed September 2001, found there is a Federal interest to proceed to the feasibility phase of the study for potential solutions for flood damage protection measures along Freeport Creek and its tributaries. The New York State Department of Environmental Conservation and the Village of Freeport are the potential local sponsors for the feasibility study who fully understand the cost sharing requirements for the feasibility phase of the study. The feasibility cost sharing agreement is scheduled for execution in July 2002.

Prior appropriated funds are being used to complete the reconnaissance study at full Federal expense, and if the Section 905 (b) analysis is certified to be in accord with policy, fiscal year 2002 funds will be used to initiate the feasibility phase of the study, including data collection and surveys. The funds requested for fiscal year 2003 will be used to continue the feasibility phase of the study, including data collection, preliminary assessments of existing baseline conditions and problem identification. The estimated cost of the feasibility phase is \$3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The reconnaissance phase is scheduled for completion in July 2002. The feasibility study is scheduled for completion in March 2010.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Lindenhurst New York District	800,000	119,000	31,000	50,000	600,000

The Village of Lindenhurst is located on the south shore of Long Island in Suffolk County, New York, and encompasses a total area of 3.8 square miles. The Village has a large shoreline along the Great South Bay and an extensive canal system. The bay is separated from the Atlantic Ocean by a barrier island that is divided by coastal inlets, the nearest of which is Fire Island Inlet.

Tidal flooding from moderate storms floods basements and main floors of hundreds of residential and commercial properties in Lindenhurst. These storms also submerge streets, isolate homeowners, and restrict emergency vehicles access in the village. The December 1992 northeaster caused some \$10 million in damages to beaches, town properties, and homes in Babylon and Lindenhurst. Tides were approximately 4 to 6 feet above normal during this storm.

The reconnaissance report, completed in September 1998, found there is a Federal interest to proceed to the feasibility phase of the study and recommended further studies for potential structural and non-structural flood damage prevention measures. The feasibility study will assess the flooding problems in the area and determine Federal interest. The New York State Department of Environmental Conservation is the potential non-Federal sponsor and understands the cost-sharing requirements for the feasibility phase of the study. The feasibility cost-sharing agreement is scheduled for execution in July 2002.

Prior appropriated funds are being use to complete the reconnaissance phase at full Federal expense. If the Section 905 (b) analysis is certified to be in accord with policy, the fiscal year 2002 funds, along with prior appropriated funds will be used to initiate the feasibility phase of the study, including data collection and coordination with local interests. Fiscal year 2003 funds will be used to continue the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions and formulate alternatives. The preliminary estimated cost of the Feasibility phase is \$1,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,500,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	700,000
Feasibility Phase (Non-Federal)	700,000

The reconnaissance phase is scheduled for completion in July 2002. The feasibility study is scheduled for completion in July 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
PENNSYLVANIA					
Bloomsburg Baltimore District	1,152,000	791,000	157,000	204,000	0

The Town of Bloomsburg is located about 50 miles southwest of Wilkes-Barre, Pennsylvania, in Columbia County and about 20 miles upstream of the Susquehanna's confluence with the West Branch Susquehanna River at Sunbury. The drainage area of the Susquehanna River at Bloomsburg is approximately 10,940 square miles including 336 square miles contiguous to Fishing Creek. Bloomsburg is subject to frequent flooding from both Fishing Creek and the Susquehanna River. Severe flooding has occurred in the past with the floods of 1936, 1972 and 1975 causing the most damage. The greatest flood of record in 1972 (Tropical Storm Agnes) was a 400-year event; a recurrence of a flood of this magnitude today would cause an estimated \$60 million in damage to several large industries, hundreds of residences, and infrastructure within the town. Significant flood damages have occurred as recently as January 1996. The town lies within the increased flooding area downstream of the Wyoming Valley Levee Raising Project and is scheduled to receive funds under the mitigation plan of that project. However, these funds are limited and will not provide substantial flood protection for the community.

The non-Federal sponsors are the Town of Bloomsburg and Commonwealth of Pennsylvania. The Town of Bloomsburg provided a letter of support dated 18 May 1998 which outlines their understanding of the study cost-sharing requirements for the feasibility study and expressed a willingness to cost-share their portions of the feasibility study. The feasibility cost-sharing agreement was executed in June 1999.

Fiscal Year 2002 funds are being used to complete concept designs for alternatives, develop detailed designs for the selected plan and substantially complete the NEPA analysis and documentation. The funds requested for fiscal year 2003 will be used to complete the feasibility study, including preparation of the feasibility report, public review of the report, report finalization, and issuance of the division engineer's notice. The estimated cost of the feasibility phase is \$2,104,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,204,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,052,000
Feasibility Phase (Non-Federal)	1,052,000

The reconnaissance phase was completed in June 1999. The feasibility study is schedule for completion in June 2003.



APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

VIRGINIA

Fourmile Run Baltimore District	800,000	0	100,000	37,000	663,000
------------------------------------	---------	---	---------	--------	---------

The study area is located in the City of Alexandria and in Arlington County, Virginia, on the Fourmile Run immediately above its confluence with the Potomac River. Fourmile Run drains an approximate 19 square-mile area from Brilyn Park, Fairfax County, Virginia, and flows southeasterly through Fairfax and Arlington Counties, and the City of Alexandria to its confluence with the Potomac River across from Washington, D.C.

The flood control project, completed in 1984, consists of improved channel, floodwall-protection system, and replacement of two highway and four railroad bridges. The project provides protection from a fluvial flood 27,000 cubic feet per second (100-year flood) on Fourmile Run. Recreational features include pedestrian and bike trails and active and passive recreational areas. The non-Federal sponsors for the project, the City of Alexandria and Arlington County, are responsible for keeping all vegetation-cleared from the stream bed and banks to insure the hydraulic performance of the authorized project. The new study effort would include a review of 25 years of new stream data available since the project was completed to determine if channel flow requirements have changed in terms of degree of flood protection provided. In addition, environmental enhancements will be identified to restore habitat for bird species and enrich conditions for fish species that once lived and reproduced within the Fourmile Run. The potential sponsors for the feasibility phase of the study are City of Alexandria and Arlington County, who fully understand the cost-sharing requirements for the study. The feasibility cost-sharing agreement is schedule for execution in January 2003.

Fiscal Year 2002 funds are being used to initiate and complete the reconnaissance phase at full Federal expense, including data gathering; coordination with the potential non-Federal sponsor(s), resource agencies, and the public; and preparation of the Section 905 (b) analysis. The funds requested for fiscal year 2003 will be used to initiate the feasibility phase of the study, including data gather, economic and environmental analyses, and public coordination. The preliminary estimated cost of the feasibility phase is \$1,400,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,500,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	700,000
Feasibility Phase (Non-Federal)	700,000

The reconnaissance phase is scheduled for completion in January 2003. The feasibility study is scheduled for completion in January 2007.

Subtotal Flood Damage Prevention Studies - Continuing	16,515,000	3,869,000	1,272,000	1,369,000	10,005,000
--	------------	-----------	-----------	-----------	------------

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

2. SURVEYS - CONTINUING

c. Shoreline Protection Studies: The amount of \$1,850,000 is requested in fiscal year 2003 to continue 10 shoreline protection studies and complete one shoreline protection study.

MARYLAND

Chesapeake Bay Shoreline Erosion, MD, VA, & PA Baltimore District	500,000	0	150,000	350,000	0
---	---------	---	---------	---------	---

The study area includes the Chesapeake Bay and tributaries in the state of Maryland, and the Commonwealths of Virginia and Pennsylvania, draining some 20,000 square miles along the east coast of the United States. The area is rural in the northern and southern portions of the watershed, and urban to suburban in the center portions of the watershed that includes the City of Baltimore and the Nation's Capitol in Washington, D.C.

Past Federal and non-Federal studies have led to construction of navigation, flood control, environmental, and site-specific shoreline protection projects. However, a comprehensive review of the bay has never been conducted. In addition, past studies have not included an examination of the management measures that could be undertaken to address the sediments behind the dams on the Lower Susquehanna River. The Corps participates in several task forces and partnerships with state and local entities, such as the Chesapeake Bay Program, which will assist in identifying existing and future problems that will affect the Chesapeake Bay.

The reconnaissance study will assess if there is a Federal interest for further feasibility studies to examine the management measures that could be undertaken to address the sediments behind the dams on the Lower Susquehanna River as well as erosion reduction measures along the Bay's shorelines, shoaling of navigation channels, and sediment transport into the Bay. In addition, potential solutions will be evaluated to restore submerged aquatic vegetation, and fish and wildlife habitat within the Bay's watershed. The scope of the reconnaissance study will be coordinated with local, state, and Federal stakeholders, river basin commissions, the Chesapeake Bay Program, and other interested parties to ascertain their interest. The potential non-Federal sponsor(s) for the feasibility phase of the study are the Susquehanna River Basin Commission, the Commonwealths of Pennsylvania and Virginia, and the State of Maryland, who fully understand the cost-sharing requirements for the feasibility study that may follow the reconnaissance study.

Fiscal Year 2002 funds are being used to initiate the reconnaissance phase of the study at full Federal expense. The funds requested for fiscal year 2003 will be used to complete the reconnaissance phase.

The reconnaissance phase is scheduled for completion in September 2003, which is 18 months after initiating the study.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

NEW JERSEY

New Jersey Shoreline, Alternative Long-Term Nourishment Study Philadelphia District	2,075,000	0	204,000	100,000	1,771,000
---	-----------	---	---------	---------	-----------

The study area includes over 120 miles of Atlantic Ocean coastline from Sandy Hook to Cape May, New Jersey. Presently, there are three Federally authorized beachfill projects constructed, two projects will be initiated this year, and an additional six ocean-front projects potentially ready for construction within the next decade. The ultimate project costs for these combined projects total over \$2 billion.

A reconnaissance study, the New Jersey Shore Protection Study, was completed in September 1990. The study found there is a Federal interest to proceed to feasibility studies and recommended further studies for potential shoreline protection projects along the Atlantic coast of New Jersey.

The feasibility study will evaluate methods to manage New Jersey's coastal projects on a regional basis to ensure maximum benefits are achieved from the Federal large investment and to reduce long-term periodic nourishment costs. The study will assess the development of a regional sediment budget; develop an improved understanding of the regional coastal processes; implement an efficient regional monitoring program; and develop a comprehensive beach, inlet, and borrow area management strategy. This study will be coordinated with the New Jersey Department of Environmental Protection, the National Marine Fishery Service, and the U.S. Fish and Wildlife Service. The potential non-Federal sponsor for the feasibility phase of the study is the New Jersey Department of Environmental Protection, who fully understands the cost-sharing requirements for the feasibility phase of the study. The feasibility cost-sharing agreement is scheduled for execution in May 2002.

Fiscal Year 2002 funds are being used to prepare a project management plan and negotiate and execute a feasibility cost-sharing agreement, and upon execution of the feasibility cost-sharing agreement for the feasibility study initiate the feasibility phase. The funds requested for fiscal year 2003 will be used to continue the feasibility phase of the study, including the plan formulation process, collection of data and the establishment of existing conditions. The preliminary estimated cost of the feasibility phase is \$4,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$4,075,000
Reconnaissance Phase (Federal)	\$ 75,000
Feasibility Phase (Federal)	\$2,000,000
Feasibility Phase (Non-Federal)	\$2,000,000

The reconnaissance phase was completed in September 1990. The feasibility study is scheduled for completion September 2009.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
New Jersey Shore Protection, Hereford Inlet to Cape May Inlet Philadelphia District	1,075,000	0	160,000	100,000	815,000

The study area is located in Cape May County along New Jersey's last coastal barrier island between Hereford Inlet and Cape May Inlet. This area includes the Towns of North Wildwood, Wildwood and Wildwood Crest. These towns are exposed to tidal flooding from coastal storms and tidal surges due to low-lying topography of the beach, which causes major damages to the Towns' businesses, residences, and small marinas. In addition, accretion of the shoreline along the southern end of the barrier island near Cape May Inlet is increasing the dredging requirements for the Federal navigation channel in Cape May Inlet. There is also a U.S. Coast Guard Receiving Center near Cape May Inlet.

A reconnaissance study, the New Jersey Shore Protection Study, was completed in September 1990. The study found there is a Federal interest to proceed to feasibility studies and recommended further studies for potential shoreline protection projects along the Atlantic coast of New Jersey.

The feasibility phase will evaluate shoreline protection measures as well as opportunities for environmental restoration associated with the back-bay areas to improve the fish and wildlife habitat and restore wetlands. The potential non-Federal sponsor for the feasibility phase of the study is New Jersey Department of Environmental Protection, who fully understands the cost-sharing requirements for the feasibility phase. The feasibility cost-sharing agreement was executed in March 2002.

Fiscal Year 2002 funds are being used to prepare a project management plan and negotiate and execute a feasibility cost-sharing agreement, and upon execution of the feasibility cost-sharing agreement for the feasibility study initiate the feasibility phase. The funds requested for fiscal year 2003 will be used to continue the feasibility phase of the study, including the plan formulation process, collection of data, and the establishment of existing conditions. The preliminary estimated cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,075,000
Reconnaissance Phase (Federal)	75,000
Feasibility Phase (Federal)	\$1,000,000
Feasibility Phase (Non-Federal)	1,000,000

The reconnaissance phase is scheduled for completion in March 2002. The feasibility study is scheduled for completion September 2007.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Raritan Bay and Sandy Hook Bay, Highlands New York District	1,750,000	46,000	189,000	100,000	1,415,000

The study area is located along the Raritan Bay and Sandy Hook Bay in the Town of Highlands, New Jersey, in northeast Monmouth County, New Jersey, approximately 20 miles southwest of the Battery New York City. This low-lying suburban area is subject to tidal flooding from coastal storms and tidal surges that cause major damages to the Town's businesses, residences, and small marinas. The recession of the beachfront has eliminated any protection afforded to the area and is exposing existing coastal protection measures and drainage works to further damage. Tidal surges often block existing storm drainage systems, which compound flooding. The purpose of the feasibility study is to assess the need for hurricane and storm damage protection measures along the shoreline.

The reconnaissance study for the overall Raritan Bay and Sandy Hook Bay Study, completed in February 1994, recommended separate interim feasibility study be conducted for the Highlands area. The reconnaissance phase, certified in February 2001, found there is a Federal interest for further studies for potential hurricane and storm damage protection measures. The feasibility phase will evaluate these measures, including floodwalls, tide gates, pump stations, and shoreline stabilization that are estimated to cost \$45 million. The New Jersey Department of Environmental Protection is the potential sponsor for the feasibility phase of the study and understands the cost-sharing requirements for the feasibility phase. The feasibility cost-sharing agreement was executed in October 2001.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study, including surveys and data gathering. Fiscal Year 2003 funds will be used to continue the feasibility phase, including data gathering, and preliminary assessments. The estimated cost of the feasibility phase is \$3,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,500,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	1,750,000
Feasibility Phase (Non-Federal)	1,750,000

The overall reconnaissance phase was completed in February 1994. The supplemental feasibility cost sharing agreement for Highlands was executed in October 2001. The feasibility study is scheduled for completion in March 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Raritan Bay and Sandy Hook Bay, Keyport New York District	1,625,000	46,000	220,000	100,000	1,259,000

The study area is located in the Town of Keyport in northern Monmouth County, approximately 20 miles southwest of the Battery New York City. This low-lying suburban area is subject to tidal flooding from coastal storms and tidal surges that cause major damages to the Town's businesses, residences, and small marinas. The recession of the beachfront has eliminated any protection afforded to the area and is exposing existing coastal protection measures and drainage works to further damage. Tidal surges often block existing storm drainage systems, which compound flooding. The purpose of the feasibility study is to assess the need for hurricane and storm damage protection measures along the shoreline.

The reconnaissance study for the overall Raritan Bay and Sandy Hook Bay Study, completed in February 1994, recommended that separate interim feasibility studies be conducted including the Keyport area. Potential solutions would include floodwalls, breakwaters, tide gates, pump stations, shore stabilization elements and appurtenant features estimated to cost \$15 million. The New Jersey Department of Environmental Protection is the potential sponsor for the feasibility study and executed a feasibility cost-sharing agreement in August 2001.

Fiscal Year 2002 are being used to continue the feasibility phase of the study, including surveys, environmental scoping, data gathering and preliminary assessments of existing baseline conditions. The funds requested for fiscal year 2003 will be used to continue the feasibility phase, including the screening of the full range of alternative solutions. The estimated cost of the feasibility phase is \$3,250,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,250,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	\$1,625,000
Feasibility Phase (Non-Federal)	\$1,625,000

The overall reconnaissance phase was completed in February 1994. The supplemental feasibility cost sharing agreement for Keyport was executed in August 2001. The feasibility study for Keyport is scheduled for completion in March 2009.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Raritan Bay and Sandy Hook Bay, Leonardo New York District	1,375,000	632,000	283,000	200,000	260,000

The study area is located along the Raritan Bay and Sandy Hook Bay in Leonardo, Monmouth County, New Jersey, with the Raritan Bay to the north, Wagner Creek to the east, the U.S. Earl Naval Weapons Pier to the west, and New Jersey State Route 36 to the south.

The Leonardo area is subject to tidal flooding from coastal storms and storm surges causing shoreline erosion and recession that affect the beach front. The downtown business and residential area, which surrounds a small harbor, is subject to significant main floor flooding from storm surges. In addition, these coastal storms and storm surges caused the recession of a short beach-front, which has eliminated any protection afforded to the area and is exposing existing coastal protection measures and drainage works to further damage. The purpose of the study for the Raritan Bay and Sandy Hook Bay Leonardo, New Jersey, area is to assess the feasibility of providing hurricane and storm damage protection measures.

The reconnaissance study for the overall Raritan Bay and Sandy Hook Bay Study, completed in February 1994, recommended separate interim feasibility study be conducted for the Leonardo area. Potential hurricane and storm damage protection measures being investigated include levees, tide gates, dunes, and beach fill. A supplemental feasibility cost-sharing agreement for Leonardo was executed in April 1999 with the New Jersey Department of Environmental Protection.

Fiscal Year 2002 funds are being used to continue feasibility phase of the study, including the refinement of alternatives, benefit and cost analyses, environmental assessments, and local coordination. Fiscal Year 2003 funds will be used to continue the feasibility phase of the study, including plan selection, economic optimization, environmental impact assessments, local coordination and initiation of draft report preparation. The cost of the feasibility phase is \$2,750,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,750,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	1,375,000
Feasibility Phase (Non-Federal)	1,375,000

The overall reconnaissance phase was completed in February 1994. The supplemental feasibility cost-sharing agreement for Leonardo was executed in April 1999. The feasibility study is scheduled for completion in September 2004.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
NEW YORK					
Jamaica Bay, Marine Park and Plumb Beach, Arverne New York District	1,000,000	4,000	31,000	50,000	915,000

The Arverne study area is located on the Rockaway peninsula in Queens County, New York, with the Atlantic Ocean to the south and Jamaica Bay to the north. The area is 15 miles southeast of the Battery New York City.

The low ground elevation levels in Arverne subjects this area's 800 residential, commercial and public structures to damages from storm events and associated storm surges. The December 1992 northeaster flooded many of the area's residences and street flooding damaged many private vehicles. Commercial business structures were also damaged forcing many businesses to close temporarily. Furthermore, the street flooding prevented emergency vehicles from reaching the area. The purpose of the feasibility study will be to determine the feasibility of providing hurricane and storm damage protection measures to Arverne.

The reconnaissance study for the overall Jamaica Bay, Marine Park and Plumb study, completed January 1994, recommended that separate interim studies be conducted including the Arverne area. Potential protection measures currently projected to cost about \$8,500,000, include levees, floodwalls and other appurtenant works. The New York State Department of Environmental Conservation, by letter dated 19 November 1996, has indicated its willingness to cost-share the feasibility phase of the study. The feasibility cost-sharing agreement is scheduled for execution in August 2002.

Fiscal Year 2002 funds, along with prior appropriated funds, will be used to initiate the feasibility phase of the study, including initial data collection, problem identification, and local coordination. The funds requested for fiscal year 2003 funds will be used to continue the feasibility study, including data collection, and formulate plan alternatives. The estimated cost of the feasibility phase is \$2,000,000, which is cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total estimated study cost	\$2,000,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

The reconnaissance phase is scheduled for completion in August 2002. The feasibility study is scheduled for completion in June 2008.



APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Jamaica Bay, Marine Park and Plumb Beach New York District	2,510,000	1,943,000	252,000	200,000	115,000

Jamaica Bay is located in the Boroughs of Queens and Brooklyn in New York City and is about 8 miles long and 4 miles wide, covers 26 square miles, and opens to the Atlantic Ocean via Rockaway Inlet. Marine Park and Plumb Beach are located on the north side of Rockaway Inlet.

The study area constitutes a vital link in this regions coastal ecology. Over 300 species of birds utilize the bay, which represents a primary junction along the Atlantic Flyway, a major migratory route for east coast waterfowl. Various parts of the bay have been declared critical or important habitat for Federally protected species including piping plovers, sea turtles, and short nose sturgeons. The bay also serves as a spawning and nursery habitat for many species of anadromous and estuarine fish, including the commercially and recreationally important striped bass and bluefish. Jamaica Bay has undergone habitat degradation related to past and present Federal dredging and filling activities. Impacts to Jamaica Bay include extensive wetland/aquatic habitat losses, shoreline and bathymetry alterations and water quality degradation from adverse hydrological changes. The combination of degraded flushing and hydrology, and loss of pristine habitat has resulted in a decline in habitat diversity within the region. As a result, Jamaica Bay has been identified for significant environmental restoration.

The reconnaissance study for the interim environmental initiatives was completed in January 1994. Potential plans and goals to be considered in subsequent phases for ecosystem restoration at Jamaica Bay including wetland restoration for aquatic and terrestrial habitats, circulation and flushing pattern alterations and bay recontouring. Project costs will be refined in the feasibility phase and will vary depending upon site-specific restoration measures.

The purpose of this feasibility study of the overall Jamaica Bay, Marine Park and Plumb Beach study area, is to determine the feasibility of environmental restoration projects to improve the native habitat and circulation patterns in Jamaica Bay. A Feasibility Cost Sharing Agreement for the environmental restoration portion of the Jamaica Bay feasibility phase effort was executed with the New York City Department of Environmental Protection on 16 February 1996.

Fiscal Year 2002 funds are being used to continue this interim study feasibility phase, including final data collection, public involvement, plan selection for selected sites, environmental assessments, cost analysis for selected plan alternatives, public involvement, and interagency coordination. Fiscal Year 2003 funds will be used to continue the feasibility phase of the study, including final site design, final costs estimates for selected sites, public

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Jamaica Bay, Marine Park  
and Plumb Beach

involvement, and interagency coordination. The estimated cost of the feasibility phase is \$4,020,000, which is cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total estimated study cost	\$4,520,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	2,010,000
Feasibility Phase (Non-Federal)	2,010,000

The reconnaissance phase for the environmental initiatives was completed in February 1996. The interim environmental initiatives feasibility study is scheduled for completion in June 2004.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
North Shore of Long Island, Asharoken New York District	998,000	318,000	252,000	200,000	228,000

The study area is located in the Village of Asharoken, a portion of the Town of Huntington in Suffolk County, New York about 40 miles east of New York City. The Village, located on a narrow spit of land about 2.5 miles long with Long Island Sound to the north and Duck Island Harbor to the south, is subject to tidal flooding from coastal storms. The feasibility study will assess potential hurricane and storm damage measures.

Residential and commercial properties in Village of Asharoken experienced major damages from storms in 1962, 1992 and 1996. During the 1992 storm, over 3000 area residents were without access and emergency services due to the flooding of Asharoken Avenue, the only access route between the Village and the Long Island mainland. The reconnaissance report for the North Shore of Long Island, completed in September 1995, found that there is Federal interest to proceed to the feasibility phase and recommended further studies for a potential plan for beach fill and buried seawalls to protect the area and keep the access roadway free from flooding. The estimated cost for this potential plan is \$21,000,000. The feasibility cost sharing agreement was executed in March 2001 with the New York State Department of Environmental Conservation.

Fiscal Year 2002 funds, along with prior appropriated funds, are being used to continue the feasibility study, including surveys and data gathering. The funds requested for fiscal year 2003 will be used to continue the feasibility phase, including environmental analyses, data collection, and preliminary assessments of existing baseline conditions. The estimated cost of the feasibility phase is \$1,996,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,996,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	998,000
Feasibility Phase (Non-Federal)	998,000

The reconnaissance phase was completed in March 2001. The feasibility study is scheduled for completion in March 2005.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
North Shore of Long Island, Bayville New York District	1,850,000	700,000	252,000	250,000	648,000

The study area The Village of Bayville is located in northeastern Nassau County on a narrow strip of land connecting the Center Island peninsula and Long Island. Bayville faces Long Island Sound to the north and Oyster Bay to the south. Several communities, especially the Village of Bayville, have incurred major losses due to coastal erosion and flooding.

Hurricanes, tropical storms, and northeasters have frequently affected the study area. In December 1992, a northeaster inundated hundreds of residential and business properties with damages estimated at \$12,000,000. Approximately 300 families were evacuated, and sections of Bayville were impassable for days.

The reconnaissance report, certified in May 1997, found there is a Federal interest to proceed to the feasibility phase and recommended further studies for potential plan for the Bayville area consisting of combined buried seawalls with setback flood walls and interior drainage works to reduce tidal inundation from Long Island Sound and Oyster Bay. The cost for this potential plan is estimated at \$30 million. The feasibility cost-sharing agreement was executed in March 2001 with the New York State Department of Environmental Conservation.

Fiscal year 2002 funds, along with prior appropriated funds for the feasibility phase of the study, are being used to continue the feasibility study, including surveys and data collection. The funds requested for fiscal year 2003 will be used to continue the feasibility phase of the study, including data collection, economic, hydraulic, environmental analyses necessary to establish baseline conditions, and formulate alternatives. The estimated cost of the feasibility study is \$2,650,000 to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,175,000
Reconnaissance Phase (Federal)	525,000
Feasibility Phase (Federal)	1,325,000
Feasibility Phase (Non-Federal)	1,325,000

The reconnaissance phase was completed in March 2001. The feasibility study schedule is scheduled for March 2005.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
South Shore of Staten Island New York District	2,000,000	1,451,000	132,000	200,000	217,000

The study area is located along the south shore of Staten Island, extending approximately 13 miles along the Lower New York Bay and Raritan Bay from Fort Wadsworth to Tottenville. The area has a long history of storm damage. In December 1992 and the March 1993, northeastern storms caused evacuations in several communities, damage to 40 structures from flooding, and loss of 30 structures from erosion. The December 1992 storm damages were estimated at \$5,000,000. The loss of beachfront now leaves the area increasingly vulnerable to severe damages, even from moderate storms.

The reconnaissance report, completed June 1995, found there is a Federal interest to proceed to the feasibility phase of the study and recommended a potential plan consisting of beach fill for the community of Annadale and a beach fill plan with dunes, levees, floodwalls and pump stations for the area from Oakwood Beach and to Fort Wadsworth. This potential plan is estimated to cost approximately \$51,000,000. The feasibility cost-sharing agreement was executed in May 1999 with the New York State Department of Environmental Conservation.

Fiscal Year 2002 funds, along with prior appropriated funds for the feasibility phase of the study, will be used to continue the feasibility study, including formulation of plan alternatives, and environmental analyses. The funds requested for fiscal year 2003 will be used to continue the feasibility phase of the study, including selection of final plan alternatives, and initiation of environmental assessments, and local coordination. The estimated cost of the feasibility phase is \$3,000,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,500,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The reconnaissance phase was completed in May 1999. The feasibility study is scheduled for completion in September 2004.

Subtotal Shoreline Protection Studies - Continuing	16,758,000	5,140,000	2,125,000	1,850,000	7,643,000
---	------------	-----------	-----------	-----------	-----------

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

2. SURVEYS - CONTINUING

d. Special Studies: The amount of \$3,613,000 is requested in fiscal year 2003 to continue 20 special studies and complete three special studies.

DELAWARE

Christina River Watershed, DE, PA, & MD Philadelphia District	1,400,000	0	100,000	100,000	1,200,000
--	-----------	---	---------	---------	-----------

The Christina River watershed is located in New Castle County, Delaware; Chester, Delaware, and Lancaster Counties in Pennsylvania; and Cecil County, Maryland, draining an approximate area of 565 square miles. The Christina River Watershed has been heavily urbanized since the mid-nineteenth century and many wetland areas were filled in for industrial uses.

A State of Delaware report, completed in 1994, evaluated the ecosystems conditions of the Christina and Brandywine Rivers. The report recommended potential measures to restore and protect the Christina and Brandywine watershed ecosystems for improving water quality, restoring stream banks, providing public access to the streams and dedicated greenways corridors, acquiring critical lands, cleaning up the watershed, establishing an urban wildlife refuge, and rejuvenating the Wilmington, Delaware, waterfront. The State of Delaware has pursued several initiatives, including restoration of 283 acres to of the Old Wilmington Marsh, transforming the marsh into an urban environmental center. In addition, the State of Delaware through local programs such as the Northern Delaware Wetlands Restoration Program and the phragmites control program is restoring 10,000 acres of wetlands and is improving more than 25,000 acres of wetlands along the Christina and Delaware Rivers.

The reconnaissance study will assess the Federal interest for ecosystem restoration and potential solutions, as well as opportunities for fish and wildlife habitat restoration and flood damage reduction measures. Flooding along the Christina River has caused damages estimated over \$4 million prior to 1980 and damages of \$1.5 million from flooding associated with Tropical Storm Agnes in 1972. Hurricane Floyd, in September 1999, which was a 100-year storm event damaged over 50 structures. The potential non-Federal sponsors are the Delaware Department of Natural Resources and Environmental Control and the Water Resources Agency for New Castle County, who understands the cost sharing requirements for the feasibility phase of the study. In a letter dated April 6, 1998, the State of Delaware supports this study. The feasibility cost-sharing agreement is scheduled for execution in December 2002.

Fiscal Year 2002 funds are being used to initiate and complete the reconnaissance phase of the study at full Federal expense. If the Section 905 (b) analysis is certified in accord with policy, the funds requested for Fiscal Year 2003 will be used to initiate the feasibility phase of the study, including engineering, economic, environmental and Real

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Christina River Watershed, DE, PA, & MD  
Philadelphia District

Estate investigations, floodplain mapping, existing and without-project conditions assessments and problem identification efforts. The preliminary estimated cost of the feasibility phase is \$2,600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,700,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	\$1,300,000
Feasibility Phase (Non-Federal)	1,300,000

The reconnaissance phase is scheduled for completion in December 2002. The feasibility study is scheduled for completion in September 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
MARYLAND					
Eastern Shore Baltimore District	3,250,000	175,000	138,000	350,000	2,587,000

The Eastern Shore study area includes seven major watersheds; Sassafras River, Chester River, Eastern Bay, Choptank River, Nanticoke River, Wicomico River, and Pocomoke River that empties into the Chesapeake Bay.

The reconnaissance report, certified in November 1999, found there is a Federal interest to proceed to the feasibility phase studies in eight areas and recommended that potential plans be evaluated for (1) wetland corridor creation, (2) wetland restoration in marginal agricultural areas, (3) wetland floodplain function restoration on naturally occurring watercourses, (4) anadromous fish passage, (5) treatment of contaminated and nutrient-laden groundwater, (6) beneficial use of dredged material, (7) land acquisition, and (8) master plan for restoration, creation, and protection of the natural infrastructure.

In prior meetings with the non-Federal sponsor, the State of Maryland, they indicated that their priority was to focus on feasibility studies to evaluate potential solutions for watershed restoration in the Nanticoke and Choptank River Basins. However, at a December 2001 meeting, representatives from the State of Maryland informed the Corps that they no longer wished to proceed with those studies and requested that the first feasibility study now focus on beneficial uses of dredged material. The non-Federal sponsor indicated that it is willing to proceed with additional feasibility phase studies in accordance with their priorities and ability to finance the studies.

This feasibility study will evaluate potential projects for beneficial uses of dredged material to restore areas within Chesapeake Bay. One site that will be considered for restoration is James Island in Dorchester County, Maryland. James Island was once connected to the mainland and had an approximate area of 1,200 acres in the late nineteenth and early twentieth centuries. However, today the island consists of two remnants of less than 100 acres. Restored areas would provide habitat for migratory waterbirds, improve shallow water conditions for submerged aquatic vegetation, and provide erosion protection to shorelines along Dorchester County. The potential non-Federal sponsor for the feasibility phase of the study is the Maryland Port Administration, who understands the cost-sharing requirements for the feasibility study. The feasibility cost sharing agreement for the first beneficial use of dredge material study is scheduled for execution in July 2002.

FY 2002 funds will be used to initiate the feasibility phase of the study, including plan formulation, environmental impact analyses, and public involvement. The funds requested for FY 2003 will be used to continue the feasibility phase of the study, including formulation plan, environmental impact analyses, and public involvement. The estimated



APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Eastern Shore  
Baltimore District

cost of the feasibility phase is \$6,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$6,350,000
Reconnaissance Phase (Federal)	150,000
Feasibility Phase (Federal)	3,100,000
Feasibility Phase (non-Federal)	3,100,000

The reconnaissance phase is scheduled for completion in July 2002. The first interim feasibility study for beneficial uses of dredged materials is scheduled for completion in September 2007.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Lower Potomac Estuary Watershed, St. Mary's Watershed Baltimore District	680,000	267,000	51,000	100,000	262,000

The Lower Potomac Estuary is 150 miles in length, has a drainage area of about 1,850 square miles and empties into the Chesapeake Bay. There are several navigation projects on the lower Potomac River. Increasing population and development growth is degrading the lower Potomac River watershed's environment in Virginia and Maryland. In addition, the construction of the Federal navigation projects contributed to the degradation and loss of the region's fish and wildlife habitats. The reconnaissance study focused on navigation, fish and wildlife restoration and creation, flood damage reduction and improvement of recreational opportunities. Completed in July 1997, the reconnaissance study recommended conducting feasibility studies in several watersheds throughout the study area to evaluate potential environmental restoration projects.

St. Mary's watershed, Maryland, is the second feasibility study to be conducted from the Lower Potomac Estuary Watershed reconnaissance effort. The feasibility study is evaluating environmental restoration needs and opportunities that Federal, State and local entities can use to plan potential projects to protect or minimize degradation to existing fish and wildlife habitats. The non-Federal sponsor is St. Mary's County. The feasibility cost sharing agreement was executed in November 2000.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study, including alternative analyses, incremental analyses, concept and detailed designs, public involvement and environmental impact analyses. The funds requested for fiscal year 2003 will be used to continue the feasibility study, including concept and detailed designs, environmental impact analyses and public involvement. The estimated cost of the feasibility phase is \$1,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$1,280,000
Reconnaissance Phase (Federal)	80,000
Feasibility Phase (Federal)	600,000
Feasibility Phase (Non-Federal)	600,000

The reconnaissance phase for the St. Mary's watershed, Maryland area was completed in November 2000. The St. Mary's watershed, Maryland, feasibility study is scheduled for completion in September 2005.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Middle Potomac River Watershed, MD, VA, PA, WV, & DC Baltimore District	500,000	0	150,000	350,000	0

The study area encompasses some 175 miles of the Potomac River from the confluence of the North and South Branches of the Potomac River in Allegany County, Maryland, through the District of Columbia to Mt. Vernon, Virginia. The Middle Potomac River Watershed area includes five counties in Maryland, two counties in Virginia, three counties in Pennsylvania, four counties in West Virginia, and the District of Columbia.

The reconnaissance study will assess if there is a Federal interest for further feasibility studies to undertake a comprehensive water resources study of the Middle Potomac River including evaluation of degradation and loss of wetlands and fish and wildlife habitat, period flooding, stream-bank erosion, and water supply and recreational management problems. Potential solutions include wetland restoration or creation, retention structures, improvement or replacement of water supply systems, riparian corridor restorations, and fish and wildlife habitat restoration including water quality improvements. The potential non-Federal sponsor(s) for the feasibility phase of the study are States of Maryland and West Virginia, Commonwealths of Pennsylvania and Virginia, Washington, D.C., and the Interstate Commission on the Potomac River Basin, who understand the cost-sharing requirements for the feasibility study that may follow the reconnaissance study.

Fiscal Year 2002 funds are being used to initiate the reconnaissance phase of the study at full Federal expense. The funds requested for fiscal year 2003 will be used to complete the reconnaissance phase.

The reconnaissance phase is scheduled for completion in September 2003, which is 18 months after initiating the study.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
MASSACHUSETTS					
Blackstone River Watershed Restoration, MA and RI New England District	1,447,000	1,120,000	63,000	140,000	124,000

The study area includes the entire Blackstone River Watershed, which originates in Worcester, Massachusetts and flows southward to the National Estuary of Narragansett Bay in Pawtucket, Rhode Island. The watershed is approximately 540 square miles and encompasses 30 cities and towns in south-central Massachusetts and northern Rhode Island. There is one Federal flood control reservoir and four local protection projects within this relatively small watershed to alleviate flooding in urban areas and protect major utilities and roadways. These projects consist of over 9 miles of channel improvements, dikes, floodwalls, tunnels and conduits that have decreased the value and diversity of fish habitat in the project areas and have altered the natural hydrologic regime of the watershed. The Blackstone River is also the largest single source of pollutants such as suspended solids, PCB's, metals and organics discharging into Narragansett Bay. One source of this pollution is the resuspension of contaminated sediments, which have collected behind existing impoundments along the river. The study will evaluate possible measures to correct the numerous problems of the Blackstone River Watershed and improve its overall resource value. A feasibility cost-sharing agreement was executed with the Massachusetts Executive Office of Environmental Affairs on 24 May 1999. By letter dated May 31, 2001, the Rhode Island Department of Environmental Management declined to participate in the feasibility study due to non-availability of its matching share at this time.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study, including sediment transport modeling and formulation of restoration plans. The funds requested for fiscal year 2003 will be used to continue the feasibility study, including cost estimates and plan evaluation. The preliminary estimated cost of the feasibility phase is \$2,040,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,467,000
Reconnaissance Phase (Federal)	427,000
Feasibility Phase (Federal)	1,020,000
Feasibility Phase (Non-Federal)	1,020,000

The reconnaissance phase was completed in May 1999. The feasibility study is scheduled for completion in September 2004.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

MASSACHUSETTS

Coastal Massachusetts Ecosystem Restoration, Massachusetts and Cape Cod Bays New England District	600,000	100,000	63,000	80,000	357,000
---	---------	---------	--------	--------	---------

The study area encompasses the Massachusetts and Cape Cod Bays (MCCB) coastal shoreline and associated waters within the Commonwealth of Massachusetts, including the EPA designated national estuary of MCCB. The biologically diverse ecosystem created by the many natural salt marshes along the Massachusetts coast has historically provided exceptionally productive fish and wildlife habitat. Salt marshes provide significant economic and environmental benefits for the region by providing flood storage, filtering pollutants, and supporting commercial fisheries as well as recreational fishing and tourism. Over the past century, many of these natural salt marshes have been lost or degraded by construction of transportation facilities and other coastal development. There are 25 navigation and 11 beach erosion control projects in this region of Massachusetts. Several of these projects involved the disposal of dredged material in coastal wetlands or salt marshes such as the Green Harbor project. Dredged material was disposed of in the Town Marsh filling approximately 35 acres of productive salt marsh above mean high tide, resulting in a relatively unproductive upland habitat. Reconnaissance studies will evaluate this and other sites to determine measures to restore the ecological productivity of the MCCB coastline. This study is consistent with the objectives of Coastal America to restore all degraded salt marshes in the Commonwealth and is supported by the Executive Office of Environmental Affairs, Department of Transportation and numerous Federal agencies, as evidenced by their signing an MOU to restore Massachusetts wetlands. The reconnaissance report, certified in August 2001, recommended feasibility studies to identify potential solutions to restore lost or degraded salt marshes as well as potential solutions to restore the natural tidal exchange and ecological productivity of the Massachusetts and Cape Cod Bays. The Massachusetts Executive Office of Environmental Affairs is aware of the cost sharing requirements for the feasibility phase and plans to execute the feasibility cost-sharing agreement in August 2002.

Fiscal Year 2002 funds will be used to initiate the feasibility phase of the study, including initial data collection, public involvement and identify lost or degraded salt marshes within the Massachusetts and Cape Cod Bays. The funds requested for fiscal year 2003 will be used to continue the feasibility study, including formulation of restoration plans and environmental analyses. The estimated cost of the feasibility phase is \$1,000,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	500,000
Feasibility Phase (Non-Federal)	500,000

The reconnaissance phase is scheduled for completion in August 2002. The feasibility study is scheduled for completion in September 2005.

## APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
MASSACHUSETTS					
Somerset and Searsburg Dams, Deerfield River, MA & VT New England District	369,000	207,000	100,000	62,000	0

The Deerfield River Watershed consists of approximately 664 square miles in southern Vermont and western Massachusetts. The Deerfield River originates in Stratton, Vermont, flowing southerly to its confluence with the Connecticut River in the town of Greenfield, Massachusetts. The Deerfield River has some 45 separate impoundments in the watershed, 15 of which still generate power (8 in Massachusetts). Most of the dams are abandoned mill dams that are not in use and some are in disrepair. Historically, much of the Deerfield River and its tributaries support runs for several fish species. River impediments, primarily in the form of dams, block the migration of anadromous fish upstream to spawning areas and smolt movement to the ocean. Similarly, catadromous fish, which typically live in fresh water and spawn in the ocean, are not able to access their primary habitat as a result of these dams. The sectioning of the river has also impacted potamodromous fish, which are freshwater species that move to faster moving streams in the watershed to spawn. In addition, impounding the river causes the loss of spawning habitat for migrating fish (e.g., removal of pool-riffle pattern, elimination of in stream cover and riparian vegetation, and establishment of unsuitable flow regimes and water depths). Reconnaissance efforts examined existing information to identify potential restoration areas and the means to restore degraded habitats. A feasibility study cost-sharing agreement was executed in April 2000 with the Massachusetts Executive Office of Environmental Affairs.

Fiscal Year 2002 funds are being used to continue the feasibility phase, including evaluation of measures to restore degraded habitats by breaching dams or providing fish ladders at the following Massachusetts sites: Wiley & Russell Dam, Greenfield (Green River); Mill Street Dam, Greenfield (Green River); Town Swimming Pool Dam, Greenfield (Green River); Water Supply Dam, Greenfield (Green River); and the BBA Nonwovens Dam, Colrain (North River). The funds requested for fiscal year 2003 will be used to complete the feasibility phase, including preparation of the final report. The estimated cost of the feasibility phase is \$606,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$672,000
Reconnaissance Phase (Federal)	66,000
Feasibility Phase (Federal)	303,000
Feasibility Phase (Non-Federal)	303,000

The reconnaissance phase was completed in April 2000. The feasibility study is scheduled for completion in September 2003.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
NEW HAMPSHIRE					
Connecticut River Ecosystem Restoration, NH & VT New England District	850,000	0	100,000	25,000	725,000

The Connecticut River Watershed extends from the northernmost part of New Hampshire to Long Island Sound and includes a small portion of the Canadian Province of Quebec. The total drainage area of the Connecticut River is 11,260 square miles of which 3,046 square miles lie in New Hampshire and 3,928 square miles in Vermont. The Connecticut River Watershed has experienced considerable development resulting in significant loss of floodplain, fish spawning habitat (e.g. Atlantic salmon, striped bass), wetlands, waterfowl nesting areas and other valuable fish and aquatic habitat. Existing aquatic habitat resources have also been impacted by deposition of eroded streambank material. In addition, the construction of dams on the river has altered the watershed's natural hydrologic regime and has blocked the passage of anadromous fish. Studies are needed to identify and evaluate measures to reduce streambank erosion, restore anadromous fisheries migratory corridors and spawning habitat, restore degraded wetlands and riverine habitat and improve the overall fish and wildlife habitat of the Connecticut River. The potential non-Federal sponsors for the study are the New Hampshire Department of Environmental Services and Vermont Agency of Natural Resources. They are aware of the Cost sharing requirements for the feasibility study. The feasibility cost-sharing agreement is scheduled for execution in July 2003.

Fiscal Year 2002 funds are being used to initiate and complete a reconnaissance study at full Federal expense. If the reconnaissance study is certified to be in accord with policy, the funds requested for fiscal year 2003 will be used to initiate the feasibility phase, including initial data collection and plan formulation. The preliminary estimated cost of the feasibility phase is \$1,500,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	750,000
Feasibility Phase (Non-Federal)	750,000

The reconnaissance phase is scheduled for completion in July 2003. The feasibility study is scheduled for completion in September 2006.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

NEW JERSEY

Hudson-Raritan Estuary, Lower Passaic River New York District	2,500,000	41,000	126,000	206,000	2,127,000
--	-----------	--------	---------	---------	-----------

The study area is located in Essex County, New Jersey, about five west of the Battery New York City and encompasses the lower Passaic River Basin from the river's confluence with Newark Bay to Dundee Dam. The area is urban to suburban and has been heavily industrialized since the mid-nineteenth century. This industrial activity has resulted in the degradation of the wetlands; discharges of effluents into the river, and dumping of refuse resulting in contaminated sediments in the river that is unfavorable for fish and wildlife habitat.

The reconnaissance report for the Hudson-Raritan Estuary, certified in July 2000, found there is a Federal interest for further studies in the lower Passaic River Basin. The interim feasibility study for the Lower Passaic River will assess items that have a Federal interest for ecosystem restoration, including contaminate reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality in the Lower Passaic River and sections of Newark bay. The potential non-Federal sponsor is the New Jersey Department of Environmental Protection, who understands the cost sharing requirements for the feasibility phase of the study. The feasibility cost sharing agreement is scheduled for execution in August 2002.

Fiscal Year 2002 funds will be used to initiate the feasibility phase of the study. Funds requested for fiscal year 2003 will be used to continue the feasibility study including data collection, economic, hydraulic and environmental analyses necessary to establish baseline conditions, and formulate plan alternatives. The preliminary estimated cost of the feasibility study is \$5,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,000,000
Reconnaissance phase (Federal)	0
Feasibility phase (Federal)	2,500,000
Feasibility phase (Non-Federal)	2,500,000

The reconnaissance phase for the Lower Passaic area is scheduled for completion in August 2002. The feasibility study schedule is scheduled for completion August 2010.



APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Lower Passaic River New York	2,600,000	100,000	252,000	30,000	2,218,000

The Passaic River Basin is a 935 square miles basin located in north-central New Jersey and southeastern New York about 15 miles northwest of the Battery New York City. The ecosystem in the Passaic River basin, particularly the lower portion of the basin, has been subjected to degradation from industrial and commercial activities since the mid-nineteenth century, as well as from urban development. Local communities desire to restore portions of the Passaic River basin to its natural state.

A reconnaissance phase will assess the ecosystem restoration opportunities and potential solutions. Restoration measures to be evaluated include restoring or recreating wetlands, fish spawning habitat, and waterfowl nesting areas. In addition, the reconnaissance study will evaluate restoring the natural river channel in areas that have been altered by flood control structures. The potential non-Federal sponsor is the New Jersey Department of Environmental Protection who understands the cost sharing requirements for the feasibility phase of the study. The feasibility cost sharing agreement is scheduled for execution in May 2002.

If the Section 905 (b) analysis is certified to be in accord with policy, fiscal year 2002 funds will be used to initiate the feasibility phase of the study, including data collection, economic, environmental analyses necessary to establish baseline conditions, and formulate alternatives. Funds requested for fiscal year 2003 will be used to continue the feasibility study by identifying the recommended plans. The preliminary estimated cost of the feasibility phase is \$5,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,100,000
Reconnaissance phase (Federal)	100,000
Feasibility phase (Federal)	2,500,000
Feasibility phase (Non-Federal)	2,500,000

The reconnaissance phase is scheduled for completion in May 2002. The feasibility study is scheduled for completion in August 2010.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Peckman River Basin New York District	2,300,000	0	63,000	50,000	2,187,000

The study area is located within the Peckman River Basin in Essex and Passaic Counties, New Jersey. The Peckman River originates in the Town of West Orange and flows through the Towns of Verona, Cedar Grove, and Little Falls, New Jersey, to its confluence with the Passaic River in West Paterson, New Jersey, draining an approximate area of 10 square miles. Within these towns, 220 homes and businesses are subject to flooding problems by the Peckman River and backwater from the Passaic River.

The reconnaissance study is assessing if there is a Federal interest to pursue further studies during the feasibility phase to determine potential solutions for flood damage reduction measures, as well as ecosystem restoration measures. A Continuing Authorities Program Section 205 flood control study is currently underway. Based on the initial evaluation, it appears that a recommended plan would exceed the current Federal limits under that program. The potential non-Federal sponsor for the feasibility phase of the study is the New Jersey State Department of Environmental Protection, who fully understands the cost sharing requirements for the feasibility study. The feasibility cost sharing agreement is scheduled for execution in May 2002.

Fiscal Year 2002 funds are being used to initiate and complete the reconnaissance phase of the study at full Federal expense. If the Section 905 (b) analysis is found to be in accord with policy, the funds requested for fiscal year 2003 will be used to initiate the feasibility phase of the study, including data collection, preliminary assessments of existing baseline conditions, and problem identification. The preliminary estimated cost of the feasibility phase is \$4,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$4,500,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,200,000
Feasibility Phase (Non-Federal)	2,200,000

The reconnaissance phase is scheduled for completion in May 2002. The feasibility study is scheduled for completion in September 2012.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Stony Brook - Millstone River Basin New York District	1,500,000	175,000	157,000	100,000	1,068,000

The study area is located in central New Jersey in Mercer, Middlesex, Monmouth, Hunterdon, and Somerset Counties and includes the Stony Brook, Peters Brook, Woodsville Brook, Baldwin Brook, Lewis Brook, and Honey Branch, all tributaries to the Millstone River. Stony Brook is the largest tributary to the Millstone River, draining an approximate 56 square miles area. This area is suburban in nature and the population is expected to grow by 30 percent by the year 2010.

Storm events cause frequent flooding in communities along Stony Brook and the other tributaries to the Millstone River. Hurricane Floyd in September 1999 and Hurricane Doria in August 1971 caused two of the largest floods of record in the area. Hurricane Floyd was a 500-year flood event inundating the area with 10-12 inches of rain in a 24-hour period and causing 4 deaths in New Jersey. A major damage center is the Borough of Manville, New Jersey, located downstream from the confluence of Stony Brook and most of the tributaries to the Millstone River. Manville experiences fluvial flooding from the Millstone River in addition to backwater flooding from the Raritan River. Eight major flood events have affected Manville since 1921 with Hurricane Floyd causing damages in the hundreds-of-millions dollars range.

The reconnaissance study, certified in November 2000, found there is a Federal interest to proceed to the feasibility phase of the study and recommended further studies for potential levees and floodwalls along the Millstone River in the Manville area. Ecosystem restoration for lake, streambank, and wetlands restoration were recommended along the Stony Brook, Millstone River, and Rocky Brook. The New Jersey Department of Environmental Protection is the non-Federal sponsor who understands the cost-sharing requirements for the feasibility phase of the study. The feasibility cost sharing agreement is scheduled for execution in July 2002.

Fiscal Year 2002 funds, along with prior appropriated funds for the feasibility study, will be used to initiate the feasibility phase of the study, including data collection and surveys. The funds requested for fiscal year 2003 will be used to continue the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions and formulate alternatives. The preliminary estimated cost of the feasibility phase is \$2,800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,900,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,400,000
Feasibility Phase (Non-Federal)	1,400,000

The reconnaissance phase is scheduled for completion in July 2002. The feasibility study is scheduled for completion in May 2009.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
NEW YORK					
Flushing Bay and Creek New York District	1,614,000	1,098,000	258,000	258,000	0

The project area is an embayment of the East River adjoining a portion of the northern coast of the Borough of Queens in New York City. The watershed area is located in a highly urbanized area of New York City.

An active Federal navigation project has existed in Flushing Bay and Creek since the 1870's. The project consists of a 15-foot channel into Flushing Bay and Creek with a 6-foot anchorage basin in the back bay. A 1,400-foot earthen dike, constructed in the 1960's, functions as a breakwater for the marina in the back bay. However, the earthen dike was deauthorized from Federal maintenance by the Water Resources Development Act 1992. Past project dredging activities, along with continued urban development, have continued to degrade the tidal wetlands leaving the remaining wetlands unsuitable to support any fish or wildlife.

The reconnaissance study, completed April 1996, found there is a Federal interest to proceed to the feasibility phase of the study and recommended potential ecosystem restoration measures, including tidal wetlands restoration, freshwater wetlands restoration, removal of the earthen dike, reorientation of the Federal navigation channel, bank stabilization, debris removal. The New York City Department of Environmental Protection is the non-Federal sponsor for the feasibility phase of the study and executed the feasibility cost-sharing agreement in September 1999.

Fiscal Year 2002 funds are being used to continue the feasibility phase of study, including hydrodynamic modeling, formulation of plan alternatives. The funds requested for fiscal year 2003 will be used to complete the feasibility phase of the study. The estimated cost of the feasibility study is \$2,728,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	\$2,978,000
Reconnaissance Phase (Federal)	250,000
Feasibility Phase (Federal)	1,364,000
Feasibility Phase (Non-Federal)	1,364,000

The reconnaissance phase was completed in September 1999. The feasibility study is scheduled for completion in June 2003.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Hudson-Raritan Estuary NY & NJ New York District	9,700,000	582,000	1,260,000	676,000	7,182,000

The study area includes the Port of New York and -New Jersey and includes the Ambrose and Anchorage Channel; New York and New Jersey Channels; Newark Bay Channel; Port Jersey Channel; Claremont Channel; Bay Ridge and Red Hook Channel; and Buttermilk Channel, the Upper and Lower New York Bays, the Raritan Bay and Jamaica Bay. The Port of New York-New Jersey is the largest port on the East coast with channels ranging depths of 35 to 45 feet. These waters and the surrounding shoreline, mudflats, intertidal marshes, and adjacent upland areas provide valuable habitat for fish, plant and wildlife resources, and accommodate migrating birds along the Atlantic flyway. The area is also utilized by a number of Federally threatened/endangered species including the shortnosed sturgeon, five species of sea turtles, peregrin falcons, piping plovers and rosette terns.

The reconnaissance report for the Hudson-Raritan Estuary, certified in July 2000, found there is a Federal interest for further studies. The feasibility phase of the study is assessing system-wide ecosystem restoration for the entire estuary, including contaminate reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality. In addition, thirteen specific sites are being evaluated for potential ecosystem restoration measures. The non-Federal sponsor for the feasibility study is the Port Authority of New York and New Jersey, who executed the feasibility cost-sharing agreement in July 2001.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study, including data gathering for the comprehensive restoration improvement plan and formulation of alternative plans and public coordination. The funds requested for fiscal year 2003 will be used to continue the feasibility phase, including data collection, economic, hydraulic, and environmental analyses, plan formulation for the comprehensive restoration improvement plan and site-specific restoration measures. The estimated cost of the feasibility study is \$19,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	19,200,000
Reconnaissance Phase (Federal)	200,000
Feasibility Phase (Federal)	9,500,000
Feasibility Phase (Non-Federal)	9,500,000

The reconnaissance phase was completed in July 2001. The feasibility study is scheduled for completion September 2012.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Hudson-Raritan Estuary, Gowanus Canal New York District	2,500,000	41,000	252,000	360,000	1,847,000

The Gowanus Canal is located in Brooklyn, New York, approximately four miles southeast of the Battery New York City. The canal is non-Federal and extends from the Hamilton Avenue Bridge at the end of a Federal navigation project northeasterly into Brooklyn for approximately two miles. The Canal was constructed about 1881 to accommodate industrial users and commercial shippers from the Brooklyn waterfront. The area around the canal has been heavily industrialized and urbanized since the mid-nineteenth century.

The Gowanus Creek Channel Federal navigation project, constructed between 1881 and 1952, is a 30-foot deep channel, with a tapering width of 500-to-200 feet from Gowanus Bay to the vicinity of Sigourney Street, then an 18-foot deep channel, with a tapering width from 200-to-100 feet to the Hamilton Avenue Bridge for an approximate length of 4000 feet. In addition, there is a 30-foot deep, 150-foot wide branch channel from Gowanus Bay extending northerly to the Henry Street basin. The industrial users of the Canal throughout the nineteenth and twentieth centuries have caused significant environmental degradation to Gowanus Creek and Gowanus Canal by allowing hazardous materials to be deposited at the bottom of these channels. In addition, the pollution poses a great risk to area residents, and fish and wildlife.

The reconnaissance report for the Hudson-Raritan Estuary, certified in July 2000, found there is a Federal interest for further studies for the Gowanus Canal. The interim feasibility study for Gowanus Canal will assess opportunities that that have a Federal interest for ecosystem restoration, including contaminate reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality. The non-Federal sponsor for the feasibility study is the New York City Department of Environmental Protection, who executed the feasibility cost-sharing agreement in January 2002.

Fiscal Year 2002 funds are being used to continue the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions, and formulate plan alternatives. Funds requested for fiscal year 2003 will be used to continue the feasibility study, including formulation of recommended plans and preparing the environmental assessments. The estimated cost of the feasibility study is \$5,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,000,000
Reconnaissance phase (Federal)	0
Feasibility phase (Federal)	2,500,000
Feasibility phase (Non-Federal)	2,500,000

The reconnaissance phase was completed in January 2002. The feasibility study schedule is scheduled for completion in September 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Saw Mill River Basin New York District	1,600,000	175,000	31,000	50,000	1,344,000

The Saw Mill River Basin is located in the southwestern part of Westchester County, New York. The drainage area of the basin is approximately 26.5 square miles. The Saw Mill River begins in the town of New Castle and flows in a southwesterly direction passing through the City of Yonkers to the Hudson River.

Federal flood control projects have been completed along several sections of the Saw Mill River at Chappaqua, Ardsley, Nepera Park, and Yonkers, New York. Construction of the flood control projects has removed the natural material in the channel bed with varying riffles and pools and replaced it with a relatively uniform bottom lined with rock and concrete mat. This has changed the aquatic resources and habitat ecology. Erosion of the channel banks has resulted and many trees immediately along the improved channel were removed along with herbaceous vegetation. Additional vegetation would result in significant habitat improvement.

The reconnaissance report, completed in November 1999, found there is a Federal interest for ecosystem restoration throughout the basin. The feasibility study will consider measures to reestablish and creation of wetlands and aquatic habitat, removal of barriers to fish migration, and streambank erosion control. The potential sponsor for the feasibility phase of the study is Westchester County, who fully understands the cost sharing requirements. The feasibility cost sharing agreement is schedule for execution in April 2002.

If the Section 905 (b) analysis is certified to be in accord with policy, fiscal year 2002 funds, along with prior appropriated funds for the feasibility study, will be used to initiate the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions. The funds requested for fiscal Year 2003 will be used to continue the feasibility phase of the study, including formulation of plan alternatives. The preliminary estimated cost of the feasibility study is \$3,000,000 to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$3,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The reconnaissance phase is scheduled for completion in April 2002. The feasibility study is scheduled for completion in August 2009.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
South Shore of Long Island New York District	2,150,000	225,000	31,000	50,000	1,844,000

The study area is the entire south shore of Long Island consisting of the embayment (back bay) areas between the Long Island mainland and its smaller barrier islands. The embayment areas, comprised of an area of approximately 155 square miles, are a critical ecosystem of salt marshes and waterways that provide habitat and spawning areas for a wide variety of species including Federally endangered shorebirds and sea turtles. The back bay system also provides substantial commercial value shellfish and finfish resources. Within the northeastern United States, at least 50 percent of finfish both directly or indirectly utilize and benefit from estuarine wetlands and back bays. Generally, a loss of wetlands has contributed to a declining finfish population in the northeast.

This study will examine the past impacts of Corps projects on these important ecosystems, habitats and water quality. Impacts that may have affected the back bay ecosystem include the loss of wetlands and associated habitats that support the fish and wildlife resources of the back bay areas in addition to the alteration of tidal patterns and the degradation of water quality, which adversely affect the biological productivity of the surrounding area. Hundreds of acres have likely been adversely impacted due to actions associated with existing Federal navigation projects and the indirect usage and development related to them. A reconnaissance report was completed in June 1997. The report recommended further studies, including salt marsh restoration; seabird/shorebird habitat restoration; shellfish restoration; shoreline protection; submerged aquatic vegetation restoration; and estuarine pond restoration. The New York State Department of Environmental Conservation and Department of State, Suffolk County, and the Town of Brookhaven strongly support this study and have indicated their willingness to execute a feasibility cost-sharing agreement. The feasibility cost-sharing agreement is scheduled for execution in July 2002.

If the Section 905 (b) analysis is certified to be in accord with policy, the fiscal year 2002 funds, along with prior appropriated funds, will be used to initiate the feasibility phase of the study, including data collection activities. The funds requested for fiscal year 2003 will be used to continue the feasibility phase of the study, including habitat and wetlands evaluation analyses; preliminary site selection and formulate plan alternatives. The preliminary estimated cost of the feasibility phase is \$4,000,000, which is cost shared on a 50-50 percent basis by Federal and non-Federal sponsor. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,150,000
Reconnaissance Phase (Federal)	150,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The reconnaissance phase is scheduled for completion in July 2002. The feasibility phase is scheduled for completion July 2010.



APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Upper Delaware River Watershed Philadelphia District	1,325,000	150,000	101,000	146,000	928,000

The study area is located in southeastern New York, encompassing the upper main stem of the Delaware River and four major tributaries, the East and West Branches of the Delaware River, the Neversink River, and the Mongaup River, draining some 2,360 square miles. In addition, there is an existing Federal project in the Village of East Branch, New York, consisting of an earthen levee and ponding area that was completed in 1972. Increasing water turbidity, streambank erosion, channel migration, and flooding are degrading the ecosystem in the Upper Delaware River, which are home to world famous trout fisheries. The watershed is the main source of potable water for 9 million people who live in the Greater New York City area, providing 700 million gallons of water per day from three reservoirs. A major flood in January 1996, damaged 30 structures, several roads and bridges, in Stamford, New York, estimated at \$375,000. This flood also damaged 40 structures, several roads, bridges and retaining structures, in Delhi, New York; and 800 residences and commercial structures in Middletown, New York, estimated at \$1.8 million. In Sullivan County, New York, 400 residences were damaged, estimated at over \$2.5 million, along with damages to roads, bridges and culverts, estimated at over \$5 million. Major flooding also occurred from storms in November 1996, June 1998, and July 1998.

The reconnaissance report, certified in July 1997, found there is a Federal interest for further feasibility phase studies. The feasibility study will evaluate potential solutions to ecosystem restoration, flood damage reduction and protection, including potential structural and non-structural measures, flood plain management techniques, streambank erosion control measures, water quality management, flow management, stream corridor management, and geographic information system modeling. The non-Federal sponsor for the feasibility phase is the New York State Department of Environmental Conservation, who fully understands the cost-sharing requirements for the study. The feasibility cost-sharing agreement is scheduled for execution in May 2002.

Fiscal Year 2002 funds are being used to initiate the feasibility phase of the study, including data gathering, and environmental analyses. The funds requested for fiscal year 2003 will be used to continue the feasibility phase of the study, including environmental, economic, and real estate analyses; plan formulation, and floodplain mapping. The preliminary estimated cost of the feasibility phase is \$2,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,525,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	\$1,200,000
Feasibility Phase (Non-Federal)	1,200,000

The reconnaissance phase is scheduled for completion in May 2002. The feasibility study is scheduled for completion September 2006.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Upper Susquehanna River Basin, NY & PA Baltimore District	1,975,000	483,000	400,000	161,000	931,000

The Upper Susquehanna River Basin, upstream of the mainstem's confluence with the Chemung River, is 120 miles in length, has a drainage area of 3,890 square miles, and includes the State of New York and the Commonwealth of Pennsylvania. The headwaters of the Susquehanna River are being degraded by agricultural land use practices, and stream bank erosion caused flooding. In addition, erosion, sedimentation, and loss of riparian and wetland habitats is contributing to water quality degradation, and suitable fish and wildlife habitats

A reconnaissance study, completed in May 2001, found there is a Federal interest to proceed with further feasibility phase studies for potential solutions to restore fish and wildlife habitats, and wetlands; flood damages reduction and protection measures, and water quality improvement. A feasibility study for the Cooperstown, New York, area will evaluate potential ecosystem restoration measures to restore existing riparian and wetland habitats for wildlife. The potential non-Federal sponsor for the interim feasibility study at Cooperstown, New York, is the New York State Department of Environmental Conservation, who understands the cost-sharing requirements for the feasibility study. The feasibility cost-sharing agreement is scheduled for execution in March 2002.

If the Section 905 (b) analysis is certified to be in accord with policy, the fiscal year 2002 funds will be used to initiate the feasibility phase of the study, including development of wetland restoration designs and regional monitoring data. The funds requested for fiscal year 2003 will be used to continue monitoring and plan formulation for the remaining restoration sites. The estimated cost of the feasibility phase is \$2,500,000, which is to be cost-shared on a 75-25 percent basis by Federal and non-Federal interests in accordance with Section 567 of the Water Resources Development Act of 1996. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	\$2,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,875,000
Feasibility Phase (Non-Federal)	625,000

The reconnaissance phase for the Cooperstown, New York, is scheduled for completion in March 2002. The feasibility study for the Cooperstown, New York, is scheduled for completion in September 2005.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

PENNSYLVANIA

Schuylkill River Basin, Wissahickon Philadelphia District	950,000	0	100,000	100,000	750,000
--	---------	---	---------	---------	---------

This study area is located in southeastern Pennsylvania, along the Wissahickon Creek, a tributary to the Schuylkill River, which is 13 miles upstream of the confluence with the Delaware River in Philadelphia, Pennsylvania. Wissahickon Creek drains an approximate 64 square miles for 25 miles. Major floods have occurred in since 1973 with the most recent flood occurring in September 1996. Damages centers include: Whitpain, Lower Gwynedd, Whitemarsh, Springfield, Ambler, West Ambler, Lansdale, Ft. Washington and Abington. In addition, flooding is also experienced along tributaries to Wissahickon Creek, which include Sandy Run, Tannery Run, and Stuart Farm Creek. The September 1996 storm event caused damages estimated at \$3.5 million, 1996 prices, to 500 residences.

A Limited Reconnaissance Study of the Schuylkill River basin, completed in 1990, recommended further studies for flood damage reduction and protection measures along Wissahickon Creek. The reconnaissance study is re-assessing the Federal interest for further feasibility studies to evaluate potential solutions for ecosystem restoration measures, flood plain management techniques, streambank erosion control, water quality management, stream flow and corridor management, and geographic information system modeling, as well as opportunities for local flood damage reduction and protection measures in City of Philadelphia, and local communities within Philadelphia and Montgomery counties, Pennsylvania. The potential non-Federal sponsors for the feasibility phase of the study are City of Philadelphia, Philadelphia and Montgomery counties, and the Pennsylvania Department of Environmental Protection, who fully understand the cost-sharing requirements for the feasibility study. The feasibility cost-sharing agreement is scheduled for execution in December 2002.

Fiscal Year 2002 funds will be used to initiate and complete the reconnaissance phase of the study at full Federal expense. If the Section 905 (b) analysis is certified in accord with policy, the funds requested for fiscal year 2003 will be used to initiate the feasibility phase of the study, including data gathering, and economic, environmental and real estate analyses. The preliminary estimated cost of the feasibility phase is \$1,700,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,800,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	850,000
Feasibility Phase (Non-Federal)	850,000

The reconnaissance phase is scheduled for completion in December 2002. The feasibility phase is scheduled for completion in September 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
RHODE ISLAND					
Rhode Island Ecosystem Restoration New England District	1,200,000	343,000	31,000	25,000	801,000

The study area encompasses all coastal and riverine areas within the Pawcatuck, Pawtuxet, Moshassuck, Ten Mile and Woonasquatucket River Watersheds; and along the western shoreline of Narragansett Bay in Rhode Island. The biologically diverse ecosystems created by the many natural salt marshes and wetlands in the study area have historically provided exceptionally productive fish and wildlife habitat. Salt marshes and wetlands provide significant economic and environmental benefits for the region by providing flood storage, filtering pollutants, supporting commercial fisheries, recreational fishing and tourism. Over the past century, many of these natural salt marshes, eel grass beds and wetlands have been lost or degraded by development activities in the coastal and riverine floodplains and from the disposal of dredged material. Development of coastal and riverine floodplains, along with the construction of dams, has also impacted historic anadromous fish populations. Studies will evaluate these and other sites to determine measures to restore the ecological productivity of the coastline and riverine areas. These studies will identify and prioritize numerous opportunities to restore degraded coastal and freshwater wetlands impacted by filling, riverine migratory corridors and submerged aquatic vegetation.

The Rhode Island Department of Environmental Management has expressed strong interest in this study and is aware of the cost-sharing requirements for the feasibility phase. However, due to limited funding, the State of Rhode Island has requested that several separate feasibility efforts be conducted. The first interim feasibility cost-sharing agreement was executed with the Rhode Island Department of Environmental Management on March 15, 2001. This interim feasibility study is assessing measures to restore anadromous fish passage at three dams, as well as lost or degraded salt marshes and freshwater wetlands along the Ten Mile River.

A second interim feasibility study will evaluate measures to restore a 12-acre salt marsh located along Narragansett Bay at the Inlet of Calf Pasture. The channel leading to Calf Pasture Marsh from the beach is not well defined and does not allow flushing except during spring or other high tide events. There are also numerous stagnant pools within the salt marsh, which are formed by interior dikes and contribute to mosquito problems. This interim study will evaluate measures to restore the ecological productivity of this coastal salt marsh. The second interim feasibility cost-sharing agreement is scheduled for execution in May 2003.

The Rhode Island Department of Environmental Management is assessing two other potential sites to conduct interim feasibility studies at this time.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Rhode Island Ecosystem Restoration  
New England District

Fiscal Year 2002 funds are being used to complete the Ten Mile River feasibility study. The funds requested for fiscal year 2003 will be used to initiate the Inlet of Calf Pasture feasibility study, including restoration of the tidal wetland, and improving tidal flow and salinity. The estimated cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,200,000
Reconnaissance Phase (Federal)	200,000
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

The reconnaissance phase was completed in March 2001. The feasibility study for the Ten Mile River interim feasibility study is scheduled for completion in July 2002. The feasibility study for the Calf Pasture interim feasibility study is scheduled for completion in September 2004. The overall feasibility study is scheduled for completion in September 2007.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

VIRGINIA

Lower Rappahannock River Norfolk District	700,000	100,000	0	157,000	443,000
--	---------	---------	---	---------	---------

The study area is comprised of 12 counties in the eastern and central portion of the State of Virginia. The 12 counties include Northumberland, Westmoreland, and King George in the lower Potomac River Basin; Essex, Lancaster, Middlesex, and Richmond in the lower Rappahannock River Basin; Gloucester, King and Queen, King William and Caroline in the York River Basin; and Mathews on the Chesapeake Bay. Growth and development are placing an ever increasing and competitive demand on available water and related resources within the 12 counties. There are significant problems, needs, and opportunities in this complex resource-rich and rapidly growing region that need to be addressed to optimize and protect the use of these resources.

The feasibility study will evaluate the impacts of development in the watershed and opportunities for ecosystem restoration. The study will focus on water conservation and control, water resources development, wetland protection, and environmental restoration. A watershed management plan will assist the Federal, state, counties, and local communities in providing an approach to watershed planning, management and regulation. The 12 county area east of Richmond, Virginia and south of Washington D.C., is one of the fastest growing areas in the state placing enormous demands on existing water resources and ecosystems. The 12 counties understand the cost-sharing requirements for the feasibility phase of the study and eight counties have provided letters of intent expressing strong support for the study. The feasibility cost-sharing agreement is scheduled for execution in May 2002.

Prior appropriated funds are being used to complete the reconnaissance phase of the study at full Federal expense. If the Section 905 (b) analysis is found to be in accord with policy, the funds requested for fiscal year 2003 will be used to initiate the feasibility phase of the study, including data collection, preliminary assessments of existing baseline conditions, problem identification, and, economic and environmental analyses. The preliminary estimated cost of the feasibility phase is \$1,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,300,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	600,000
Feasibility Phase (Non-Federal)	600,000

The reconnaissance phase is scheduled for completion in May 2002. The feasibility study is scheduled for completion in April 2005.

## APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Lynnhaven River Basin Norfolk District	600,000	0	100,000	37,000	463,000

The Lynnhaven River Basin study area is located in Virginia Beach, Virginia, on the south shore of the Chesapeake Bay. The Lynnhaven River drains an approximate 50 square miles watershed in southeastern Virginia, flowing northerly and emptying into the Chesapeake Bay about 10 miles east of Norfolk, Virginia. A Federal navigation project is maintained within upper reaches of the river. The project depth varies from a 10-foot deep at the river's entrance with Chesapeake Bay, to a 6-foot deep channel in the narrows between Broad Bay and Linkhorn Bay.

The reconnaissance study will assess the Federal interest for ecosystem restoration and potential solutions, as well as opportunities to improve the environmental quality of the Lynnhaven River Basin, restore wetlands, submerged aquatic vegetation, and fish and wildlife habitat. The river basin was once a highly productive ecosystem known worldwide for the famous Lynnhaven oyster. However, residential and commercial development gradually degraded the environment within the basin that resulted in a declined of oysters harvested from 410,000 pounds in 1929-30 to essentially no marketable production today. In addition, only 900 acres wetlands currently exist within the basin, less than half that was present 30 years ago. The study will be coordinated with the ongoing activities of the Commonwealth of Virginia, watershed groups, and local governments, including the Cities of Norfolk and Virginia Beach. The potential non-Federal sponsor for the feasibility phase of the study is the City of Virginia Beach, Virginia, who fully understands the cost-sharing requirements for the feasibility study. The feasibility cost-sharing agreement is scheduled for execution in September 2002.

Fiscal Year 2002 funds are being used to initiate and complete the reconnaissance phase of the study at full Federal expense. If the Section 905 (b) analysis is found to be in accord with policy, the funds requested for fiscal year 2003 will be used to initiate the feasibility phase of the study, including data collection, preliminary assessments of existing baseline conditions, and problem identification. The preliminary estimated cost of the feasibility phase is \$1,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	500,000
Feasibility Phase (Non-Federal)	500,000

The reconnaissance phase is scheduled for completion in September 2002. The feasibility study is scheduled for completion in September 2005.

Subtotal Special Studies Continuing	42,310,000	5,382,000	3,927,000	3,613,000	29,388,000
--	------------	-----------	-----------	-----------	------------

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

2. SURVEYS - CONTINUING

e. Comprehensive Studies: The amount of \$300,000 is requested in fiscal year 2003 to continue one comprehensive study.

NEW HAMPSHIRE

Merrimack River Basin, NH and MA New England District	3,850,000	229,000	315,000	350,000	2,956,000
--	-----------	---------	---------	---------	-----------

The Merrimack River originates in Franklin, New Hampshire at the confluence of the Pemigewasset and Winnepesaukee Rivers and flows southerly towards the Massachusetts border then easterly towards the coast. The Merrimack River basin encompasses an approximate 5,010 square miles area in Massachusetts and New Hampshire. Significant improvements have been made to improve the overall quality of the Merrimack River. Federal and state agencies, communities and the private sector have made substantial investments in wastewater treatment plants to address point source pollution. However, elimination of combined sewer outfalls (CSOs) is needed to fully restore the ecosystem to support habitat for anadromous fisheries, a source of drinking water, and provide a recreational resource for the region. The US Environmental Protection Agency is requiring the communities of Haverhill, Lawrence, and Lowell in Massachusetts and Manchester and Nashua in New Hampshire to address eliminating CSOs discharges into the Merrimack River. Current estimates for eliminating CSOs is over \$500 million and the five communities are concerned with the high cost. These communities are requesting that studies be conducted to identify less costly options to eliminate CSOs in their communities, as well as opportunities to restore anadromous fisheries, improve fish and wildlife habitat, restore degraded wetlands, address low flow issues, and improve the river's water quality. This study is being conducted pursuant to Section 729 of the Water Resources Development Act of 1986. The non-Federal sponsors for the study are the States of Massachusetts and New Hampshire, who understand the cost sharing requirements for the study. The cost-sharing agreement is scheduled for execution in March 2002.

Fiscal Year 2002 funds are being used to negotiate and execute the study cost-sharing agreement and initiate the study phase. Studies will identify opportunities to restore anadromous fisheries, improve fish and wildlife habitat, restore degraded wetlands, correct combined sewer overflows, address low flow issues and improve the river's overall water quality. The study will also include analysis to assist the communities in prioritizing CSO



APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Merrimack River Basin, NH and MA  
New England District

investments. Funds requested for Fiscal Year 2003 will be used to continue the study phase. The preliminary estimated cost of the study is \$7,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$7,600,000
Reconnaissance Phase	100,000
Study Phase (Federal)	3,750,000
Study Phase (Non-Federal)	3,750,000

The study is scheduled for completion in September 2009.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
NEW YORK					
Delaware River Basin Comprehensive, NY, NJ, DE & PA Philadelphia District	2,100,000	0	450,000	100,000	1,550,000

The Delaware River basin is located in 28 counties in portions of New York, New Jersey, Delaware and Pennsylvania, draining an approximate 12,765 square mile area. The river basin has experienced considerable degradation over the past two hundred years due urbanization and industrialization. In addition, the river basin includes the Atlantic Flyway, the final stopover for millions of migratory birds. The river basin is divided into the upper and lower basins. The upper basin area includes small rural and agricultural communities, some heavily populated and industrialized areas, and abandoned mining complexes, which are experiencing developmental, recreational, and environmental pressures; and acid mine drainage problems from over twenty locations. The lower basin, which includes the area from Trenton to Philadelphia through Delaware Bay is heavily urbanized and industrialized, and includes commercial navigation projects. These deep draft navigation projects place millions of cubic yards of sediments annually into numerous upland disposal sites that has degraded thousands of acres of wetlands and terrestrial habitat.

The study will utilize a holistic approach to problem resolution including: ecosystem restoration, protection, and enhancement; dredged material disposal, water quality control (to include acid mine drainage abatement with dredged material), floodplain management and flood damage reduction; and associated land resources. The study will utilize a comprehensive watershed approach which would work closely with recent and ongoing initiatives, such as, Pennsylvania's 21<sup>st</sup> Century Environment Commission and Growing Greener Restoration Program, New Jersey's newly created Division of Watershed Management, and Delaware's Northern Delaware's Wetland Rehabilitation Program. Generally, the objectives of these efforts are to restore and protect watersheds; preserve open space and farmland; reclaim abandoned mines and wells; adopt sound land use planning practices; make infrastructure investments that do not promote sprawl; and invest in restoring public lands. On September 29, 1999, the governors of the four Delaware Basin States (Delaware, New Jersey, New York and Pennsylvania) signed a resolution directing the development of a "new comprehensive water resources plan for the basin". This study is being conducted pursuant to Section 729 of the Water Resources Development Act of 1986. The potential non-Federal sponsors for the study phase are the New York Department of Environmental Conservation, the New Jersey Department of Environmental Protection, the Delaware Department of Natural Resources, the Pennsylvania Department of Environmental Protection, and the Delaware River Basin Commission, who fully understand the cost-sharing requirements for the study. The cost-sharing agreement is scheduled for execution in December 2002.

Fiscal year 2002 funds will be used to develop a scope for the study, prepare a project management plan, and negotiate a cost-sharing agreement. The funds requested for fiscal year 2003 will be used to initiate the study, including preparation of background information, problem identification, evaluation of existing basin models and public lands, engineering, economic, environmental and real estate investigations, floodplain mapping, and existing and

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Delaware River Basin Comprehensive,  
NY, NJ, DE & PA  
Philadelphia District

without-project conditions assessments. The preliminary estimated cost of the study phase is \$3,300,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,750,000
Reconnaissance Phase (Federal)	450,000
Study Phase (Federal)	\$1,650,000
Study Phase (Non-Federal)	1,650,000

The study is scheduled for completion in September 2009.

Subtotal Comprehensive Studies Continuing	5,950,000	229,000	765,000	450,000	4,506,000
--	-----------	---------	---------	---------	-----------

f. Project Review Studies: None

TOTAL SURVEYS - CONTINUING	90,709,000	18,423,000	9,382,000	8,413,000	54,491,000
----------------------------	------------	------------	-----------	-----------	------------

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - NEW

- a. Watershed/Ecosystem: None
- b. Navigation: None.
- c. Beach Erosion Control: None.

d. Flood Control: The amount of \$30,000 is requested in fiscal year 2003 to initiate one flood control PED activity.

Upper Passaic River, Long Hill Township New York District	1,875,000	0	0	30,000	1,845,000
--	-----------	---	---	--------	-----------

The Upper Passaic River, Long Hill Township, project area is located within the Central Passaic River Basin, an oval 262 sq mile depression which is 10 miles wide and 30 miles long. The community suffers from water resource problems along the river. Problems identified include: flooding and habitat losses due to aquatic ecosystem degradation.

This project area is located within the Central Passaic River Basin in the Township of Long Hill, New Jersey, which is about 20 miles west of the Battery New York City. Major flooding damages commercial, residential, and industrial properties in the town. In addition, the Central Passaic River basin contains 24,485 acres of natural flood storage area, including the Great Swamp National Wildlife Refuge. The feasibility study is assessing potential flood control projects to include closure structures for culverts along the tributaries and raising and reconstructing existing roadways to elevate them above the 100-year flood level. In addition, potential environmental restoration projects are being considered along the Upper Passaic River and some tributaries. The feasibility study is scheduled for completion in August 2003. The potential project will provide a 100-year level of protection to commercial and residential properties. The preliminary estimated project cost is \$20,000,000, with an estimated Federal cost of \$13,000,000 and an estimated non-Federal cost of \$7,000,000. The average annual benefits for the flood control project amount to \$1,550,000, all for flood damage reduction. The benefit-cost ratio is approximately 1.2 to 1, based on the latest economic analysis. The potential non-Federal sponsor is New Jersey Department of Environmental Protection, who by letter dated June 2000 fully understands the cost sharing requirements for this effort. The design agreement is schedule for execution in August 2003. Preconstruction engineering and design will ultimately be cost shared at the

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Upper Passaic River, Long Hill Township  
New York District

rate for the project to be constructed, but will be financed through the preconstruction engineering and design period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first years of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering And Design Cost	\$2,500,000	Engineering Design Cost	\$2,500,000
Initial Federal Share	1,875,000	Ultimate Federal Share	1,625,000
Initial Non-Federal Share	625,000	Ultimate Non-Federal Share	875,000

Consistent with the cost-sharing and financing concepts exacted by the Water Resources Development Act of 1986 and 1996, local interests are required to provide all lands, easements, right-of-ways, relocations, and disposal areas; and pay 35 percent of all costs allocated to flood control and environmental protection and restoration.

Fiscal Year 2003 funds will be used to initiate preconstruction engineering and design, including detailed engineering and design activities. The preconstruction engineering and Design effort is scheduled for completion in September 2010.

Subtotal Flood Control (PED)					
Activities - New	1,875,000	0	0	30,000	1,845,000

e. Multiple Purpose Power: None.

TOTAL PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED)- New	1,875,000	0	0	30,000	1,845,000
---	-----------	---	---	--------	-----------

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING

- a. Watershed/Ecosystem: The amount of \$1,142,000 is requested in fiscal year 2003 to continue two watershed/ ecosystem PED activities and complete three watershed/ ecosystem PED activities.

Baltimore Metropolitan Water Resources,  
Gwynns Falls  
Baltimore District

945,000	0	31,000	50,000	864,000
---------	---	--------	--------	---------

The project area includes portions of the Patapsco River basin in Baltimore City, Maryland. The State of Maryland has identified the Patapsco River watershed as a high-priority area to focus its effort for improving the water quality in the Chesapeake Bay. Numerous problems contributed to the loss and degradation of fish and wildlife habitat in the watershed, including dredging from the Baltimore Harbor and Channels project. A feasibility study for the Gwynns Falls watershed is assessing a potential ecosystem restoration project, which is scheduled for completion in July 2002. The potential project includes construction of stream and streambank restoration, stormwater ponds, wetland creation, restoration of riparian vegetation and removal of fish passage blockages. The preliminary estimated project cost is \$12,000,000 with an estimated Federal cost of \$7,800,000 and an estimated non-Federal cost of \$4,200,000. No benefit-cost ratio has been computed for this project because it is an ecosystem restoration project and benefits are not quantifiable in monetary terms. Baltimore City, Maryland, fully understands the preconstruction engineering and design cost-sharing requirements and is expected to be the non-Federal sponsor for this effort. The design agreement is scheduled for execution in September 2002. Preconstruction engineering and design will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the preconstruction engineering and design at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal construction in line with the project cost-sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Effort Costs	\$1,260,000	Total Estimated Preconstruction Engineering and Design Costs	\$1,260,000
Initial Federal Share	945,000	Ultimate Federal Share	819,000
Initial Non-Federal Cost	315,000	Ultimate Non-Federal Cost	441,000

Consistent with the cost-sharing and financing concepts enacted by the Water Resources Development Act of 1986 and 1996, local interests are required to provide all lands, easements, right-of-ways, relocations, and disposal areas; and pay 35 percent of all costs allocated to environmental protection and restoration.

Fiscal Year 2002 funds will be used to continue to execute the design agreement and initiate the preconstruction engineering and design phase, detailed engineering and design activities. The funds requested for fiscal year 2003 will be used to continue preconstruction engineering and design activities, including development of detailed plans. The preconstruction engineering and design effort is scheduled for completion in September 2008.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Smith Island Environmental Restoration Baltimore District	600,000	162,000	189,000	249,000	0

Smith Island is located on the eastern shore of Maryland near the Maryland-Virginia border in Somerset County. The island Maryland's only inhabited offshore island having been settled in the mid 1600's. There are three towns on the island Ewell, Rhodes Point and Tylerton, with harbors that are used by the oystering and crabbing industries. In the past 100 years, 1,200 acres of Smith Island have eroded into the Chesapeake Bay, and future erosion will destroy the island if left unchecked. There are Federal navigation channels being maintained for the island, all of which were formulated and constructed prior to today's recognition of fish and wildlife values. The feasibility study investigated fish and wildlife habitat restoration, wetlands restoration, SAV habitat restoration, navigation improvements, and storm protection. Areas of special concern include Rhodes Point, Tylerton, and threatened and decreasing SAV beds in Big Thorofare and around the Martin Wildlife Refuge. The feasibility report was completed in May 2001. The recommended projects identified in the feasibility study include construction of environmental restoration measures including protection/restoration of SAV habitat and protection/creation of wetlands and navigation improvements. The estimated project cost is \$9,300,000, with an estimated Federal cost of \$6,000,000 and an estimated non-Federal cost of \$3,300,000. No benefit-cost ratio has been computed for this project because it is an environmental restoration project and benefits are not quantifiable in monetary terms. The Maryland Department of Natural Resources fully understand the preconstruction engineering and design cost-sharing requirements and is expected to be the non-Federal sponsors for this effort. The design agreement is scheduled for execution in April 2002. Preconstruction engineering and design will ultimately be cost shared at the rate for the project to be constructed but will be financed through the preconstruction engineering and design at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal construction in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Effort Costs	\$800,000	Engineering and Design Costs	\$800,000
Initial Federal Share	600,000	Ultimate Federal Share	520,000
Initial Non-Federal Cost	200,000	Ultimate Non-Federal Cost	280,000

Consistent with the cost-sharing and financing concepts exacted by the Water Resources Development Act of 1986 and 1996, local interests are required to provide all lands, easements, right-of-ways, relocations, and disposal areas; and pay 35 percent of all costs allocated to environmental protection and restoration.

Fiscal Year 2002 funds are being used to prepare the design memorandum and plans and specifications. The funds requested for Fiscal Year 2003 will be used to complete the design memorandum and plans and specifications. The preconstruction engineering and design effort is scheduled for completion in June 2003.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

MASSACHUSETTS

Muddy River, Brookline and Boston New England District	1,200,000	500,000	378,000	322,000	0
---	-----------	---------	---------	---------	---

The project area includes a 5.6 square mile area of the Muddy River watershed located in Boston, Brookline and Newton, Massachusetts. The river flows through the heart of the famed "Emerald Necklace", one of the most carefully crafted park systems in the country. The park system is located adjacent to many residential areas, prominent Boston institutions, and businesses such as the Museum of Fine Arts, Northeastern University, Wentworth, Simmons and Emmanuel Colleges, and the Longwood Medical Center, that are subjected to flooding from storm events. A major storm in October 1996 caused over \$70,000 in damages to Boston's underground mass transit system. In addition, urban runoff and sewer cross-connections have degraded the river's ecosystem habitats, and water quality. Sedimentation at bends in the river also has impacted the river's ecosystem with the colonization of Phragmites along the riverbanks. A potential flood damage prevention project has been recommended to dredge 161,500 cubic yards of sediments from the Muddy river between Wards Pond and the Charles River, enlarge or removing restrictive culverts, stabilizing riverbanks, and remove nuisance vegetation. The project would reduce flood damages, enhance recreation, and restore ecosystem habitat. The preliminary estimated project cost is \$51,400,000 with an estimated Federal cost of \$33,410,000 and an estimated non-Federal cost of \$17,990,000. Average annual benefits amount to \$13,180,000, of which \$12,737,000 are for flood damage reduction and \$433,000 for enhanced recreation, based on the feasibility report. The benefit-cost ratio is 3.3 to 1. The project sponsors are the Commonwealth of Massachusetts, City of Boston and Town of Brookline, who fully understand the cost sharing requirements for the project and are ready to sign the design agreement in July 2002. Preconstruction engineering and design will ultimately be cost shared at the rate for the project to be constructed but will be financed through preconstruction engineering and design at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$1,600,000	Engineering and Design Costs	\$1,600,000
Initial Federal Share	1,200,000	Ultimate Federal Share	1,040,000
Initial Non-Federal Share	400,000	Ultimate Non-Federal Share	560,000

The project is authorized for construction under Section 522 of the Water Resources Development Act of 2000. Consistent with the cost-sharing and financing concepts exacted by the Water Resources Development Act of 1986 and 1996 as amended, local interests are required to provide all lands, easements right-of-ways, relocations, and disposal areas; and pay 35 percent of all costs allocated to environmental protection and restoration.

Fiscal Year 2002 funds are being used to continue preconstruction engineering and design, including environmental compliance. The funds requested for fiscal year 2003 will be used to complete preconstruction engineering and design activities in September 2003.



APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
NEW YORK					
Hudson River Habitat Restoration, Combined Sites New York District	375,000	73,000	0	50,000	252,000

The project area for the Combined Sites interim project includes Schodack Island Complex area near Stuyvesant, New York; Mill Creek Wetlands area near Stuyvesant, New York; and Manitou Marsh area near Peekskill, New York. The River and Harbor Act of 1910 authorized a 12-foot navigation channel for the Hudson River, New York - New York City to Waterford. The Rivers and Harbors Acts of 1935 and 1938, which authorized deepening of the channel to 32 feet to the Federal Lock at Troy New York, and 14 feet to the southern limit of the State Barge Canal at Waterford, modified the project. Prior to this project, a series of low-profile dikes were constructed by the Corps to create a stable channel for deep-draft navigation between New York City and the Port of Albany, and for barge traffic to the New York State Barge Canal System. Dredging the channels by the Corps over the past 100 years has produced approximately 83,000,000 cubic yards of dredged material, which was disposed of in embayments, marshes, backwaters, and secondary channels behind islands. The dredged material was also used to construct new islands, extend and/or connect existing islands, filling in additional wetland and aquatic habitats. Since 1891, approximately 2,800 acres of wetland and aquatic habitat have been lost and 60 miles of shallow habitat deepened. Striped bass, Shad, Atlantic sturgeon and herring use the shallows and wetland habitat for spawning and as a primary nursery during their critical developmental stages. The river also contains a rare stable population of the endangered Shortnose sturgeon, and certain of the effected habitat is critical for its survival. The National Marine Fisheries Service, U.S. Fish and Wildlife Service, Museum of the Hudson Highlands, Nature Conservancy, Audubon Society, Scenic Hudson, electric utilities and railroads desire habitat restoration.

This project consists of creation of fringe wetlands and restoration of interior marsh on Schodack Island; recreation of former back-bay marsh and shallow water habitat at Mill Creek; and restoration of hydrology and grade at Manitou Marsh. The feasibility report for the Combined Sites interim project is scheduled for completion in November 1999. The recommended project is estimated to cost \$8,500,000, with an estimated Federal cost of \$5,500,000 and an estimated non-Federal cost of \$3,000,000. No benefit-cost ratio has been computed for this project because it is an environmental restoration project and benefits are not quantifiable in monetary terms. The New York State Department of Environmental Conservation and New York State Department of State are the potential sponsors to cost-share the preconstruction engineering and design effort, who fully understand the cost sharing requirements and are expected to be the non-Federal sponsors for this effort. The design agreement is scheduled for execution in July 2002. Preconstruction engineering and design will ultimately be cost shared at the rate for the project to be constructed but will be financed through the preconstruction engineering and design at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal construction in line with the project cost sharing will be accomplished in the first year of construction.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Hudson River Habitat Restoration,  
Combined Sites  
New York District

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$500,000	Engineering and Design Costs	\$500,000
Initial Federal Share	375,000	Ultimate Federal Share	325,000
Initial Non-Federal Share	125,000	Ultimate Non-Federal Share	175,000

The project is authorized for construction by the Water Resources Development Act of 1996, with the following cost-sharing requirements: local interests are required to provide all lands, easements, right-of-ways, relocations, and disposal areas; and pay 35 percent of all costs allocated to environmental protection and restoration.

Fiscal Year 2002 carryover funds will be used to continue preconstruction engineering and design, including data collection and detailed model studies for the Combined Sites interim project. Fiscal Year 2003 funds will be used to continue the preconstruction, engineering and design phase. This preconstruction engineering and design effort is scheduled for completion in September 2004.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

VIRGINIA

Elizabeth River Basin, Environmental Restoration, Hampton Roads Norfolk District	650,000	0	179,000	471,000	0
--	---------	---	---------	---------	---

The project area includes Elizabeth River Basin within the Southside Hampton Roads area of southeastern Virginia, including the cities of Suffolk, Portsmouth, Chesapeake, Norfolk, and Virginia Beach. Three hundred years of industry and commerce have made the Elizabeth River one of the nation's most contaminated waterways. Portions of the river have been dredged to twice its natural depth and narrowed to two-thirds its natural width. There is an existing deep draft navigation project to 35 feet on the Southern Branch of the river that is part of the Norfolk Harbor and Channels project. Only limited wetlands in the 20-mile reach remains to support wildlife and filter pollution. The feasibility study, completed in July 2001, recommended an ecosystem restoration project to be implemented along the Southern Branch of the Elizabeth River under the authority of Section 312(b) of WRDA 1990, as amended. In addition, the feasibility study recommended eight projects to be implemented under the Continuing Authorities Section 206 program to create and restore wetlands along the river as well as remediation of contaminated river bottom sediments. The estimated project cost is \$13,200,000, with an estimated Federal cost of \$8,600,000 and for wetland restoration is \$4,600,000. No benefit-cost ratio has been computed for this project because it is an environmental restoration project and benefits are not quantifiable in monetary terms. The Cities of Chesapeake, Norfolk, Portsmouth, Virginia Beach, Virginia, who fully understand the cost-sharing requirements for the design agreement. The design agreement is scheduled for execution in June 2002. Preconstruction engineering and design will ultimately be cost shared at the rate for the project to be constructed but will be financed through the preconstruction engineering and design at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal construction in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Cost	\$1,000,000	Total Estimated Preconstruction Engineering and Design Cost	\$1,000,000
Initial Federal Share	750,000	Ultimate Federal Share	650,000
Initial Non-Federal Share	250,000	Ultimate Non-Federal Share	350,000

Consistent with the cost-sharing and financing concepts exacted by the Water Resources Development Act of 1986 and 1996, local interests are required to provide all lands, easements, right-of-ways, relocations, and disposal areas; and pay 35 percent of all costs allocated to environmental protection and restoration.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Elizabeth River Basin, Environmental Restoration, Hampton Roads Norfolk District					
Fiscal Year 2002 funds will be to initiate the preconstruction, engineering, and design, including finalizing the design plans and preparation of plans and specifications. The funds requested in fiscal year 2003 will be used to complete preconstruction and engineering activities in February 2003.					
Subtotal Watershed/Ecosystem (PED) Activities - Continuing	3,770,000	735,000	777,000	1,142,000	1,116,000

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING

b. Navigation: The amount of \$384,000 is requested in fiscal year 2003 to continue one navigation PED activity and complete one navigation PED activity.

VIRGINIA

Atlantic Intracoastal Waterway Bridge at Deep Creek Norfolk District	1,375,000	150,000	299,000	275,000	651,000
--	-----------	---------	---------	---------	---------

The Atlantic Intracoastal Waterway is a naturally protected navigation route that parallels the Atlantic coast between Massachusetts and Florida. The waterway's route intersects several existing highways that is the responsibility of the Corps of Engineers. One of these bridges is located in the Deep Creek community of Chesapeake, Virginia, about 150 miles southeast of Washington, D.C. The bridge, constructed in 1934, is a Federally owned and operated facility over which U.S. Route 17 crosses the Dismal Swamp Canal. The city of Chesapeake requested that the need to modify or replace the bridge be investigated in conjunction with the City's plans to improve area's roadway and Commonwealth of Virginia plans to improve U.S. Route 17 south of the bridge. These improvements are needed to accommodate the increasing development in this area. In October 1996, the approved Initial Appraisal concluded that the bridge is functionally obsolete because of its narrow roadway and poor alignment with the connecting roads, compounded by increasing traffic volumes. The feasibility study, completed in April 2001, recommended a project to replace the bridge with a five lane, double leaf, rolling-lift bascule bridge. The project cost is estimated to be \$16,500,000 with estimated Federal cost of \$15,700,000 and an estimated non-Federal cost of \$800,000. The average annual benefits amount to 3.5 million, all for transportation savings, based on the latest economic analysis dated 11 January 2000. The benefit-cost ratio is 1.7 to 1. The potential project sponsor is City of Chesapeake, Virginia, who fully understands the project cost-sharing requirements. Preconstruction engineering and design will ultimately be cost-shared at the rate for the project to be constructed, but will be financed through the preconstruction engineering and design period at 100 percent Federal funds because inland navigation projects are exempt from the 25 percent non-Federal financing requirement. In addition, the City of Chesapeake has agreed to assume ownership of the bridge and all operation, maintenance, repair, replacement, and rehabilitation responsibilities.

Total Estimated Preconstruction Engineering and Design Cost	\$1,375,000	Total Estimated Preconstruction Engineering and Design Cost	\$1,375,000
Initial Federal Share	1,375,000	Ultimate Federal Share	1,375,000
Initial Non-Federal Share,	0	Ultimate Non-Federal Share	0

Consistent with the cost-sharing and financing concepts enacted by the Water Resources Development Act of 1986, local interests are required to provide all lands, easements, rights-of-way, relocations, approaches, and any costs associated with widening culverts or other structures, bear all costs of betterments to the project, and provide all costs of operation, maintenance of the bridge.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Atlantic Intracoastal Waterway  
 Bridge at Deep Creek  
 Norfolk District

Fiscal Year 2002 funds will be used to continue preconstruction engineering and design, including detailed engineering and design activities. The fund request for fiscal year 2003 will be used to continue preconstruction engineering and design, including detailed engineering and design. The preconstruction engineering and design effort is scheduled for completion in March 2004.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
James River Norfolk District	671,000	376,000	186,000	109,000	0

The existing Federal navigation project on the James River extends from the mouth of the river at Hampton Roads to the City of Richmond locks, a distance of approximately 91 miles. Richmond is located in east central Virginia about 100 miles south of Washington, D. C. The study area includes one element of the project--a 25-foot deep and up to 600-foot wide, and 2,770-foot long turning basin adjacent to the Richmond Deepwater Terminal, about 5 miles downstream from the city locks. The terminal handles bulk, breakbulk, and container cargo. The turning basin is authorized up to a depth of 35 feet and width of 825 feet under the River and Harbor Act of 23 October 1962. As a result of recent improvements to the terminal that is used by several shippers, the size of vessels calling at that port has increased. The larger ships, some reaching a length of 559 feet and a width of 85 feet, frequently experience problems when exiting the turning basin, particularly when other vessels are docked at the terminal's wharf. Based on current operations there is a need to expand the width of the turning basin within the limits of the existing project authorization. Under these circumstances, when a ship now arrives at the terminal and makes its turn to prepare for docking, contact is sometimes made with the river channel bank. In order to complete the turn, the ship is then forced to back up and to swing around at a distance of only about 25 feet from the wharf. This presents a dangerous situation to both wharf and ship. Other large vessels including oil barges and large bulk ships that call at various wharves upstream and downstream from the Richmond Deepwater Terminal also use the turning basin. These vessels cannot accomplish the turn necessary to make the return trip down the James since those sections of the river are too narrow. As a consequence, these vessels travel to the turning basin where they are able to make their turn. There is concern that there is potential for a serious accident that would cause damage to vessels or the wharf. The situation is worsened by the fact that there are no drydock repair facilities in Richmond to handle large vessels. The Section 905 (b) analysis, approved in September 1998, confirmed that there is a Federal interest for widening the turning basin within the current authorization. The recommended project is estimated to cost \$15,200,000, with estimated Federal cost of \$11,400,000 and a non-Federal cost of \$3,800,000. The average annual benefits amount to \$300,000, all for transportation savings, based on the Section 905 (b) analysis approved in September 1998, at August 1998 price levels. The benefit-cost ratio is 2.2 to 1. The potential local sponsor for the port is the City of Richmond, Virginia, who indicated its support for expanding the turning basin in a letter dated 3 November 1997. The preconstruction engineering and design cost-sharing agreement was executed in June 1999. Preconstruction engineering and design phase will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the preconstruction engineering and design period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contributions in line with the project cost-sharing will be accomplished in the first year of construction.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

James River  
Norfolk District

Total Estimated Preconstruction			Total Estimated Preconstruction	
Engineering and Design Cost	\$895,000		Engineering and Design Cost	\$895,000
Initial Federal Share	671,000		Ultimate Federal Share	671,000
Initial Non-Federal Share	224,000		Ultimate Non-Federal Share	224,000

The Rivers and Harbors Act of 1962 authorized the project for construction. In accordance with the cost-sharing and financing concepts enacted by the Water Resources Development Act of 1986, local interest are required to provide all lands, easements, rights-of-way, and relocations necessary for the construction and subsequent maintenance including the prorated costs if using existing and future Federal disposal areas; pay 25 percent of costs allocated to deep draft navigation, presently estimated at \$3,800,000; and pay an additional 10 percent of costs allocated to deep draft navigation, less a credit for the value of lands, easements, rights-of-way, and relocations (other than utility relocation) within the 30 years following completion.

Fiscal Year 2002 funds are being used to continue preconstruction engineering and design, including the preparation a general reevaluation report. Fiscal Year 2003 funds will be used to complete the preconstruction engineering and design, including plans and specifications in June 2003.

Subtotal Navigation (PED)					
Activities - Continuing	2,046,000	526,000	485,000	384,000	651,000



APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING

c. Beach Erosion Control: The amount of \$800,000 is requested in fiscal year 2003 to continue five beach erosion control PED activities.

DELAWARE

Delaware Coast from Cape Henlopen to Fenwick Island, Fenwick Island Philadelphia District	514,000	0	200,000	100,000	214,000
---	---------	---	---------	---------	---------

This project is located along the Atlantic coast of Delaware in Sussex County, for one mile just north of the Delaware-Maryland state border. Major storms that occurred in September 1944, March 1962, December 1974, October 1977, March 1984, March 1989, October 1991, January 1992, December 1992 and January 1996 have left the Fenwick Island beachfront vulnerable to severe damages from tidal surges and wave attacks. Even moderate storms today can cause major damage to the island's beachfront, damage residential and commercial properties, cause loss of lives, and subject families to inconvenience from evacuation of their homes. Since 1992, the President of the United States has twice declared the area a National Disaster Area. Damage estimates reported in March 1962, January 1992 and January 1996 were \$16,700,000, \$1,000,000 and \$700,000, at the time of each storm, respectively. The feasibility study for the Fenwick Island area was completed in June 2000. The recommended hurricane and storm damage reduction project will consist of a beach berm 75 feet wide and 6,500 feet long at an elevation of +7.7 feet NAVD and a dune at elevation +17.7 feet NAVD. The initial beachfill will place an estimated 595,400 cubic yards of sand. Subsequent periodic nourishment, required every four years over the 50-year project life, will place 320,000 cubic yards of sand. The preliminary estimated initial project cost is \$6,700,000, with an estimated Federal cost of \$4,400,000 and an estimated non-Federal cost of \$2,300,000. The average annual benefits amount to \$2,785,000, all for hurricane and storm damage reduction savings, based on the latest economic analysis dated October 1999. The benefit-cost ratio is 2.1 to 1. The project sponsor is the Delaware Department of Natural Resources and Environmental Control, who fully understands the cost-sharing requirements and is expected to be the non-Federal sponsor for this effort. The design agreement is scheduled for execution in March 2002. Preconstruction engineering and design phase will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the preconstruction engineering and design period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contributions in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	\$685,000	Total Estimated Preconstruction Engineering and Design Costs	\$685,000
Initial Federal Share	\$514,000	Ultimate Federal Share	\$445,000
Initial Non-Federal Share	\$171,000	Ultimate Non-Federal Share	\$240,000

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Delaware Coast from Cape Henlopen to  
Fenwick Island, Fenwick Island  
Philadelphia District

The Water Resources Development Act of 2000 authorized the project for construction. In accordance with the cost-sharing and financing concepts enacted by the Water Resources Development Act of 1986, as amended, local interests are required to provide all lands, easements, rights-of-way, and relocations necessary for the construction, estimated at \$1,500,000; pay 35 percent of initial project costs allocated to hurricane and storm damage reduction, estimated at \$2,100,000; and pay 50 percent of the cost of periodic nourishment for the 50 year life of the project every 4 years, estimated at \$2,100,000.

Fiscal Year 2002 funds are being used to initiate the preconstruction engineering and design phase, including detailed engineering and design activities. Fiscal Year 2003 funds will be used to continue preconstruction engineering and design efforts, including preparation of plans and specifications. The preconstruction engineering and design effort is scheduled for completion in September 2005.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Great Egg Harbor Inlet to Townsends Inlet Philadelphia District	1,043,000	112,000	200,000	300,000	431,000

This project area is located along the Atlantic coast of New Jersey in Cape May County about 8 miles South of Atlantic City, New Jersey, and includes the coastal barrier islands of Peck Beach and Ludlum Beach. Major storms that occurred in September 1944, March 1962, March 1984, September 1985, October 1991, January 1992, and December 1992 have left these two coastal barrier island beachfronts vulnerable to severe damages. Even moderate storms today can cause major damage to the islands' beachfronts, residential and commercial properties, cause lost lives, and subject families to be inconvenienced by evacuating their homes. The March 1962 storm damaged 2,629 structures with damages estimated at \$24,300,000. The December 1992 storm caused damages to the area estimated at \$1,300,000. A feasibility report was completed in September 2001. The recommended plan consists of a hurricane and storm damage reduction project with a 100-foot wide berm and dunes at elevation +13 NAVD for the southern end of Ocean City, New Jersey, and a 50-foot wide berm and dunes at elevation +15 NAVD for Ludlum Beach. Periodic nourishment will be required every 3 years on Peak Beach Island and every 5 years on Ludlum Beach Island for the 50-year project life. The initial estimated project cost is \$44,900,000, with an estimated Federal cost of \$29,200,000 and an estimated non-Federal cost of \$15,700,000. The average annual benefits amount to \$1,887,000, for the south end of the Peck Beach Island portion and \$2,064,000 for the Ludlum Beach Island portion of the project, all for hurricane and storm damage reduction savings, based on the latest economic analysis dated October 2000. The benefit-cost ratio is 1.9 to 1 and 1.5 to 1 for each project portion, respectively. The project sponsor is New Jersey Department of Environmental Protection, who fully understand the cost sharing requirements and is expected to be the non-Federal sponsor for this effort. The design agreement is scheduled for execution in April 2002. Preconstruction engineering and design phase will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the preconstruction engineering and design period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contributions in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$1,391,000	Engineering and Design Costs	\$1,391,000
Initial Federal Share	\$1,043,000	Ultimate Federal Share	\$ 904,000
Initial Non-Federal Share	\$ 348,000	Ultimate Non-Federal Share	\$ 487,000

Consistent with the cost-sharing and financing concepts enacted by the Water Resources Development Act of 1986 as amended, local interest are required to provide all lands, easements, rights-of-way, and relocations necessary for the construction, estimated at \$400,000; pay 35 percent of costs allocated to beach erosion control, estimated at \$14,900,000; and pay 50 percent of the cost of periodic nourishment for the 50 year life of the project every 3 years for the Peak Beach Island project portion and every 5 years for the Ludlum Beach Island project portion, estimated at \$900,000.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Great Egg Harbor Inlet Townsends Inlet  
Philadelphia District

Fiscal Year 2002 funds are being used to continue the preconstruction engineering and design, including detailed engineering and design activities. Fiscal Year 2003 funds are being requested to continue the preconstruction engineering and design, including preparation of plans and specifications. The preconstruction engineering and design phase is scheduled for completion in September 2005.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Manasquan Inlet to Barnegat Inlet Philadelphia District	750,000	112,000	50,000	200,000	388,000

This project area is located along 24 miles of the Atlantic coast of New Jersey in Ocean County about 31 miles north of Atlantic City, New Jersey, and includes the coastal barrier peninsula of Island Beach. Major storms that occurred in September 1944, March 1962, March 1984, September 1985, October 1991, January 1992, and December 1992 have left the area beachfronts vulnerable to severe damages. Even moderate storms today can cause major damage to the area's beachfronts, damage residential and commercial properties, cause loss of lives, and subject families to inconvenience from evacuation of their homes. The March 1962 storm damaged 5,759 structures with damages estimated at \$8,000,000. The December 1992 storm caused damages to the area estimated at \$2,000,000. The feasibility study for Manasquan Inlet to Barnegat Inlet area is assessing a potential project for hurricane and storm damage reduction measures is scheduled for completion in May 2002. The potential project consists of a berm 75 feet wide with dunes at an elevation of +22 feet. The preliminary estimated initial project cost is \$55,200,000, with an estimated Federal cost of \$35,900,000 and an estimated non-Federal cost of \$19,300,000. The average annual benefits amount to \$12,200,000, all for hurricane and storm damage reduction savings, based on the latest economic analysis dated January 2001. The benefit-cost ratio is 2.1 to 1. The project sponsor is New Jersey Department of Environmental Protection, who fully understand the cost sharing requirements and is expected to be the non-Federal sponsor for this effort. The design agreement is scheduled for execution in June 2002. Preconstruction engineering and design phase will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the preconstruction engineering and design period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contributions in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	\$1,000,000	Engineering and Design Costs	\$1,000,000
Initial Federal Share	750,000	Ultimate Federal Share	650,000
Initial Non-Federal Share	250,000	Ultimate Non-Federal Share	350,000

Consistence with the cost-sharing and financing concepts enacted by the Water Resources Development Act of 1986 as amended, local interest are required to provide all lands, easements, rights-of-way, and relocations necessary for the construction, estimated at \$700,000; pay 35 percent of costs allocated to hurricane and storm damage reduction, estimated at \$18,600,000; and pay 50 percent of the cost of periodic nourishment for the 50 year life of the project every 4 years, estimated at \$3,200,000.

Fiscal Year 2002 funds are being used to initiate the preconstruction engineering and design phase, including detailed engineering and design activities. Fiscal Year 2003 funds will be used to continue the preconstruction engineering and design phase, including preparation of plans and specifications. The preconstruction engineering and design effort is scheduled for completion in September 2005.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Raritan Bay and Sandy Hook Bay, Port Monmouth New York District	3,000,000	265,000	315,000	100,000	2,320,000

The project area is located in Port Monmouth, New Jersey, in northern Monmouth County, bounded by the Sandy Hook Bay to the north, Compton's Creek to the east, Pew's Creek to the west and Middletown, New Jersey, to the south, about 18 miles southwest of the Battery New York City. In Port Monmouth flooding from the creeks and tidal storm surges causes damage to commercial and residential properties during storms. The recommended project will protect about 1,200 properties with levees, floodwalls, dunes, and a storm-tide gate. In addition, pumping stations and ponding areas with outlet gates are included for interior drainage. The estimated initial project cost is \$34,900,000, with an estimated Federal cost of \$22,700,000 and an estimated non-Federal cost of \$12,200,000. The average annual benefits amount to \$3,200,000, all for hurricane and storm damage reduction. The benefit-cost ratio is approximately 1.1 to 1, based on the latest economic analysis dated June 1998. The project sponsor is New Jersey Department of Environmental Protection, who by letter dated June 2000 fully understands the cost sharing requirements for this effort. The design agreement is scheduled for execution in April 2002. Preconstruction engineering and design will ultimately be cost shared at the rate for the project to be constructed, but will be financed through the preconstruction engineering and design period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first years of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering And Design Cost	\$4,000,000	Engineering Design Cost	\$4,000,000
Initial Federal Share	3,000,000	Ultimate Federal Share	2,600,000
Initial Non-Federal Share	1,000,000	Ultimate Non-Federal Share	1,400,000

The Water Resources Development Act of 2000 authorized the project for construction. In accordance with the cost-sharing and financing concepts enacted by the Water Resources Development Acts of 1986, as amended, local interests are required to provide all lands, easements, rights-of-way, relocations; pay a portion of the initial construction costs allocated to storm damage reduction, so that the total contributions of the local interests is equal to 35 percent of the initial construction cost allocated to storm damage reduction; bear all costs of betterments to the project; pay 50 percent of the costs allocated to periodic nourishment over 50 years; and provide all costs of operation, maintenance and replacement of storm damage reduction facilities.

Fiscal Year 2002 funds will be used to initiate preconstruction engineering and design, including detailed engineering and design activities. Fiscal Year 2003 funds will be used to continue the preconstruction, engineering and design, including preparation plans and specifications. The preconstruction engineering and design effort is scheduled for completion July 2010.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Raritan Bay and Sandy Hook Bay, Union Beach New York District	4,000,000	0	94,000	100,000	3,806,000

The project area is located in Union Beach, New Jersey, in northern Monmouth County, bounded by the Raritan Bay to the north, East Creek to the east, Chingarora Creek to the west and Township of Hazlet, New Jersey, to the south. This area is about 18 miles southwest of the Battery New York City. In Union Beach, flooding from the creeks and tidal storm surges causes damage to commercial and residential properties during storms. The feasibility study is assessing potential projects to protect about 1,800 properties with levees, floodwalls, dunes, and a storm-tide gate. In addition, pumping stations and ponding areas with outlet gates are included for interior drainage. The feasibility study is scheduled for completion in July 2002. The estimated initial project cost is \$70,000,000, with an estimated Federal cost of \$45,500,000 and an estimated non-Federal cost of \$24,500,000. The average annual benefits amount to \$8,800,000, all for hurricane and storm damage reduction. The benefit-cost ratio is approximately 1.6 to 1, based on the latest economic analysis dated September 1999. The potential project sponsor is New Jersey Department of Environmental Protection, who fully understands the cost sharing requirements for this effort. The design agreement is schedule for execution in August 2002. Preconstruction engineering and design will ultimately be cost shared at the rate for the project to be constructed, but will be financed through the preconstruction engineering and design period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first years of construction.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering And Design Cost	\$5,330,000	Engineering Design Cost	\$5,330,000
Initial Federal Share	4,000,000	Ultimate Federal Share	3,460,000
Initial Non-Federal Share	1,330,000	Ultimate Non-Federal Share	1,870,000

Consistent with the cost-sharing and financing concepts enacted by the Water Resources Development Acts of 1986, as amended, local interests are required to provide all lands, easements, rights-of-way, relocations; pay a portion of the initial construction costs allocated to storm damage reduction, so that the total contributions of the local interests is equal to 35 percent of the initial construction cost allocated to storm damage reduction; bear all costs of betterments to the project; pay 50 percent of the costs allocated to periodic nourishment over 50 years, every ten years; and provide all costs of operation, maintenance and replacement of storm damage reduction facilities.

Fiscal Year 2002 funds will be used to initiate preconstruction engineering and design, including detailed engineering and design activities. Fiscal Year 2003 funds will be used to continue the preconstruction, engineering and design. The preconstruction, engineering and design effort is scheduled for completion in September 2011.

Subtotal Beach Erosion Control (PED)					
Activities - Continuing	9,307,000	489,000	859,000	800,000	7,159,000

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING

d. Flood Control: The amount of \$370,000 is requested in fiscal year 2003 to continue two flood control PED activities.

NEW JERSEY

Passaic River, Harrison New York District	2,000,000	525,000	252,000	270,000	953,000
--	-----------	---------	---------	---------	---------

This project area is located on the lower Passaic River in Town of Harrison, New Jersey, which is about 10 miles west of the Battery New York City. Major flooding damages commercial, residential, and industrial properties in the town. The recommended project from the draft Passaic River Main Stem general design memorandum, completed in September 1995, includes a levee and floodwall system consisting of 1,750 feet of levees, 6.5 feet high and 50 feet wide; and 5,700 feet of floodwalls 6.2 feet high. In addition, there will be eight closure structures in the system and interior drainage facilities with gravity culverts with flap and sluice gates, and three pumping stations. The project will provide a 100-year level of protection to about 200 commercial and residential properties in Harrison, New Jersey. The recommended project is estimated to cost \$16,500,000, with an estimated Federal cost of \$10,700,000 and an estimated non-Federal cost of \$5,800,000. The benefit-cost ratio is approximately 3.4 to 1, based on the latest economic analysis dated October 1994. The project sponsor is New Jersey Department of Environmental Protection, who fully understands the cost sharing requirements for this effort. Preconstruction engineering and design will ultimately be cost shared at the rate for the project to be constructed, but will be financed through the preconstruction engineering and design period at 100 percent Federal funds because preconstruction engineering and design initiated prior to fiscal year 1997 are exempt from the 25 percent non-Federal financing requirement. Preconstruction engineering and design for this project was initiated under the Passaic River Mainstem, New Jersey, project. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first years of construction.

Total Estimated Preconstruction Engineering And Design Cost	\$2,000,000	Total Estimated Preconstruction Engineering Design Cost	\$2,000,000
Initial Federal Share	2,000,000	Ultimate Federal Share	1,300,000
Initial Non-Federal Share	0	Ultimate Non-Federal Share	700,000

The Water Resources Development Act of 1990, as modified by the Water Resources Development Act of 1992 authorized this project for construction. In accordance with the cost-sharing and financing concepts enacted by the Water Resources Development Acts of 1986, as amended, local interests are required to provide all lands, easements, rights-of-way, relocations, disposal areas; pay 35 percent of all cost allocated to flood control and environmental protection and restoration; bear all costs of betterments to the project; and provide all costs of operation, maintenance and replacement of flood control facilities.



APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
-------	--	---	-----------------------------	--	--

Passaic River, Harrison  
New York District

Fiscal Year 2002 funds will be used to continue preconstruction engineering and design, including preparation of the decision document and the project management plan. The funds requested for fiscal year 2003 will be used to continue the pre-construction engineering and design, including detail engineering and coordination of the environmental documentation. The preconstruction engineering and design effort s scheduled for completion in August 2005.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
South River, Raritan River Basin New York District	3,000,000	0	252,000	100,000	2,648,000

The project area includes the communities of Sayreville, South River, and East Brunswick, New Jersey, along the South River, a tributary to the Raritan River, located in Middlesex County, New Jersey. This highly developed suburban area is subject to tidal flooding from storms. The storms that occurred in December 1992 and March 1993 caused damages estimated at \$6,100,000 to residential and commercial properties. The feasibility study for South River is assessing a potential project for flood control measures as well as an ecosystem restoration measure, which is scheduled for completion in August 2002. The potential flood control project consists of levees, floodwalls, interior drainage facilities consisting of pumping stations and ponding areas with outlet gates, and a storm-tide gate at the Veteran's Memorial Bridge in South River. This project will protect approximately 1,200 residential and commercial structures in Sayreville, South River, and East Brunswick. In addition, several sites for ecosystem restoration have been selected, including a 350-acre island along the Washington Canal and South River. The preliminary estimated project cost is \$41,200,000, with an estimated Federal cost of \$26,800,000 and an estimated non-Federal cost of \$14,400,000. The average annual benefits for the flood control project amount to \$2,200,000, all for flood damage reduction. The benefit-cost ratio is approximately 1.4 to 1, based on the latest economic analysis dated April 1999. By a letter dated March 18, 1999, the New Jersey Department of Environmental Protection indicated its support for the project and fully understands the preconstruction engineering and design agreement cost-sharing requirements. The design agreement is scheduled for execution in August 2002. Preconstruction engineering and design will ultimately be cost shared at the rate for the project to be constructed, but will be financed through the preconstruction engineering and design period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first years of construction.

Total Estimated Preconstruction Engineering And Design Cost	\$4,000,000	Total Estimated Preconstruction Engineering Design Cost	\$4,000,000
Initial Federal Share	3,000,000	Ultimate Federal Share	2,600,000
Initial Non-Federal Share	1,000,000	Ultimate Non-Federal Share	1,400,000

Consistent with the cost-sharing and financing concepts exacted by the Water Resources Development Act of 1986 and 1996, local interests are required to provide all lands, easements, right-of-ways, relocations, and disposal areas; and pay 35 percent of all costs allocated to flood control and environmental protection and restoration.

Fiscal Year 2002 funds will be used to initiate preconstruction engineering and design, including detailed engineering and design activities. The funds requested for fiscal year 2003 will be used to continue preconstruction engineering and design. The preconstruction engineering and Design effort is scheduled for completion in September 2009.

Subtotal Flood Control (PED)					
Activities - Continuing	5,000,000	525,000	504,000	370,000	3,601,000

APPROPRIATION TITLE: General Investigations, Fiscal Year 2003

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING					
e. Multiple Purpose Power. None					
TOTAL PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING	20,123,000	2,275,000	2,625,000	2,696,000	12,527,000
GRAND TOTAL SURVEYS AND PRECONSTRUCTION ENGINEERING AND DESIGN	112,707,000	20,698,000	12,007,000	11,139,000	68,863,000

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Baltimore Harbor Anchorages and Channels, MD (Continuing)

LOCATION: The project area encompasses the 32-square mile area of the Port of Baltimore. The port area of Baltimore includes the navigable part of the Patapsco River below Hanover Street, the Northwest and Middle Branches, and Curtis Bay and its tributary, Curtis Creek.

DESCRIPTION: The recommended plan will widen and deepen two existing Federal anchorages; widen several connecting channels; provide a new turning basin near Fort McHenry; and provide a new branch channel within the Port of Baltimore. The estimated 3.9 million cubic yards of initial dredged material will be placed in the existing Hart-Miller Island upland placement site.

AUTHORIZATION: Water Resources Development Act of 1999.

REMAINING BENEFIT - REMAINING COST RATIO: 2.1 to 1 at 6 7/8 percent.

TOTAL BENEFIT - COST RATIO: 1.3 to 1 at 6 7/8 percent.

INITIAL BENEFIT - COST RATIO: 4.7 to 1 at 6 7/8 percent (FY 2001).

BASIS OF BENEFIT-COST RATIO: Benefits are based on the Limited Reevaluation Report dated November 2001 at October 1999 price levels.

SUMMARIZED FINANCIAL DATA	ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$18,300,000			
Estimated Non-Federal Cost:	\$7,700,000	Entire Project	0	Apr 03
Cash Contributions	\$6,315,000			
Other Costs	\$1,385,000			
Total Estimated Project Cost	\$26,000,000			

Division: North Atlantic

District: Baltimore

Baltimore Harbor Anchorages and Channels, MD

SUMMARIZED FINANCIAL DATA: (Continued)

Allocation to 30 September 2001	\$ 989,000	
Conference Allowance for FY 2002	8,000,000	
Allocations for FY 2002	6,721,000	<u>1/</u>
Allocations through FY 2002	7,710,000	42
Allocation Requested for FY 2003	10,590,000	100
Scheduled Balance to Complete		
After FY 2003	0	
Unscheduled Balance to Complete		
After FY 2003	0	

1/ Reflects \$1,279,000 reduction assigned as savings and slippage.

PHYSICAL DATA

Channels: Widening the East Dundalk Channel to 400 feet, plus the bends and entrances; widening the Seagirt-Dundalk Connecting Channel to 500 feet; widening the West Dundalk Channel to 500 feet, plus the bends and entrances; providing cutoff angles at the intersection of the West Dundalk channel and the main shipping channel; providing cutoff angles at the intersection of the Connecting Channel and the west side of Dundalk Marine Terminal; constructing a new channel at South Locust Point in the area of the remnant Produce Wharf Channel

Anchorage: Deepening and widening a portion of Anchorage #3 to 2,200 feet by 2,200 feet and 1,800 feet by 1,800 feet, by 42 feet deep; deepening and widening a portion of Anchorage #4 to 1,800 feet by 1,800 feet, by 35 feet deep; deauthorization of Anchorage #1

Turning Basin: Constructing a 50-foot deep turning basin (1,200 feet by 1,200 feet) near the head of the Fort McHenry Channel.

JUSTIFICATION: Baltimore Harbor is one of the major seaports serving the North Atlantic Coast of the United States. It is equipped with excellent cargo handling facilities and is served by several railroads which connect the port with the Midwest States. The port is 50 to 200 miles nearer the Midwest States than other North Atlantic ports. The port includes, among its many industries, the free world's largest steel plant. Waterborne commerce through the port totaled 43,552,000 in 1996 and averaged 40,610,600 tons annually for the period 1986-1996. A large portion of the port's commerce moves in foreign trade, and a very high percentage consists of bulk commodities (grain, ores, petroleum and coal). These bulk commodities are moved most efficiently in large carriers, and the trend towards such carriers is clearly evident in the Port of Baltimore. The smaller vessels are being replaced by larger, more efficient ships.

The existing branch channel and anchorage system in Baltimore Harbor is of insufficient depth and width to accommodate these larger ships. Large vessels requiring anchorage must anchor 25 miles south of Baltimore in naturally deep water, resulting in delays and related costs to the shipping industry. In addition, some of the branch channels within the port are also insufficient to accommodate the types of vessels currently calling on Baltimore. Due to the narrow widths of the branch channels serving the Seagirt and Dundalk Marine Terminals, additional time is required for the pilots to safely maneuver ships to and from the berths. The average annual benefits, all navigation, are \$2,428,000 based on 1 October 1999 prices and a 6 7/8% interest rate.

Division: North Atlantic

District: Baltimore

Baltimore Harbor Anchorages and Channels, MD

FISCAL YEAR 2003: The requested amount will be applied as follows:

Complete dredging of the anchorage and branch channels	\$10,390,000
Construction Management	200,000
Total	\$10,590,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the Non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements and rights of way, Disposal areas	\$1,385,000	
Pay 25 percent of the costs allocated to general navigation facilities during construction and pay 50 percent of the costs of incremented maintenance below 45 feet below mean low water	\$6,315,000	
Total Non-Federal Costs	\$7,700,000	\$0

STATUS OF LOCAL COOPERATION: The State of Maryland has agreed to furnish the required cooperation. In their January 2001 and November 2001 letters, the Maryland Port Administration indicated its intent to be the project's non-Federal sponsor and to utilize Hart-Miller Island for placement of the dredged material. The Project Cooperation Agreement was executed in December 2001.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$18,300,000 is a decrease of \$2,700,000 from the latest estimate (\$21,000,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 900,000
Other Estimating Adjustments	-\$3,600,000
Total	-\$2,700,000

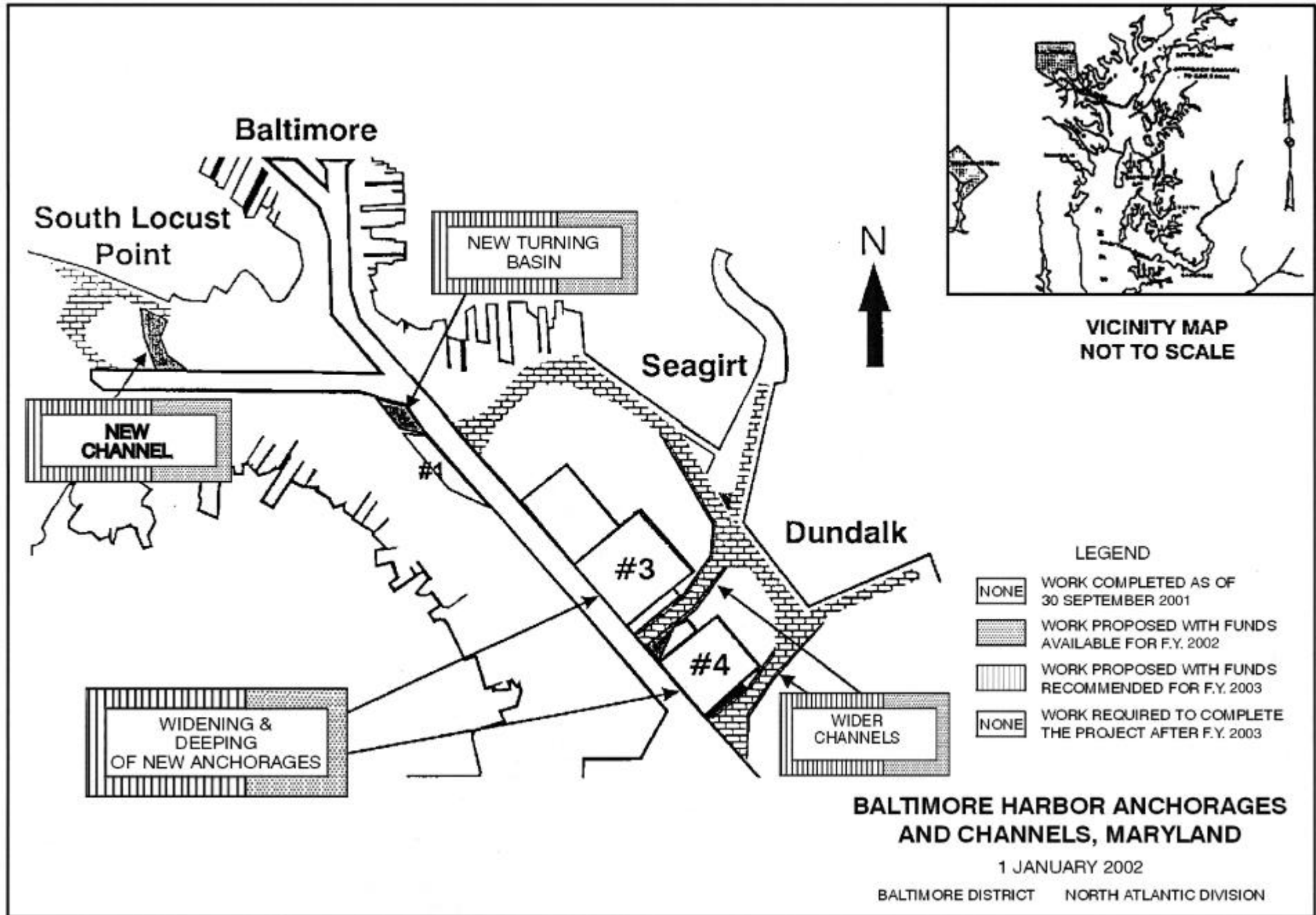
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final environmental impact statement for the Baltimore Harbor Anchorages and Channels, MD & VA project was filed in the Federal Register on 5 August 1997. A supplemental environmental assessment to address minor design changes since project authorization along with a finding of no significant impact was completed in November 2001.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2001.

Division: North Atlantic

District: Baltimore

Baltimore Harbor Anchorages and Channels, MD



APPROPRIATION TITLE: Construction, General - Navigation (Deep Draft)

PROJECT: Delaware River Main Channel, New Jersey, Pennsylvania, and Delaware (continuing)

LOCATION: The project extends over 100 miles from deep water in Delaware Bay to the tri-state, Ports of the Delaware River including Philadelphia and Beckett Street Terminal, Camden, New Jersey. It involves the Commonwealth of Pennsylvania, and the States of New Jersey and Delaware.

DESCRIPTION: The recommended plan of improvement deepens the existing Federal navigation Channel (Philadelphia to the Sea project) from the 40 foot project to 45 feet, widens bends, deepens an anchorage along with relocation and addition of navigation aids.

AUTHORIZATION: Water Resources Development Act of 1992(Sec.101(6))

REMAINING BENEFIT-REMAINING COST RATIO: 1.4 to 1 at 7 3/8 percent

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 7 3/8 percent

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 7 3/8 percent (FY 1999).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Limited Reevaluation Report dated May 1997 at October 1996 price levels.

SUMMARIZED FINANCIAL DATA:

Estimated Appropriation Requirement (CoE)	243,000,000
Estimated Appropriation Requirement (USCG)	1,190,000
Estimated Total Appropriation Requirement	244,190,000
Future Non-Federal Reimbursement	11,180,000
Estimated Federal Cost (Ultimate) (CoE)	233,010,000
Estimated Non-Federal Cost	144,180,000
Cash Contributions	80,800,000
Other Costs	52,200,000
Reimbursements: Comm'l Navigation	11,180,000
Total Estimated Project Cost	377,190,000

STATUS:

(1 Jan 2002)

PERCENT

COMPLETE

PHYSICAL

COMPLETION

SCHEDULE

Channel Dredging:

0

Sept 2008

Entire Project

0

Sept 2008

PHYSICAL DATA:

Channel: Channel deepening (dredging of about 85 miles widening and deepening of bends; deepening of an anchorage.

Disposal Construction: Four confined upland disposal areas and two beneficial use areas.

Navigation aids.: Relocation and additional navigation aids

Division: North Atlantic

District: Philadelphia

Delaware River Main Channel, NJ, PA & DE



SUMMARIZED FINANCIAL DATA: (Cont)

		ACCUM. PCT. OF EST. FED COST
Allocations to 30 September 2001	14,355,000	
Conference Allowance for FY 2002	10,000,000	
Allocation for FY 2002	5,673,000	1/
Allocations through FY 2002	20,028,000	8
Allocation Requested for FY 2003	12,000,000	13
Programmed Balance to Complete after FY 2003	\$210,972,000	
Unprogrammed Balance to Complete after FY 2003	0	

1/ Reflects \$1,598,000 reduction assigned as savings and slippages and \$2,729,000 reprogrammed from the project.

JUSTIFICATION: The existing 40 foot Federal navigation project restricts efficient movement of tankers, dry bulk carriers, and container vessels. These conditions now result in significant light loading and lightering costs, and vessels delays. The 45-foot project results in transportation savings to commodities consisting of crude oil imports, iron ore imports, container ship movements and scrap exports. The average annual quantity of tonnage that will benefit from the project are as follows: oil 57 million tons, dry bulk 7 million tons, and container 1.5 million tons. The estimated average benefits are \$40,143,000 (Oct 1996 Price Level) and at an average cost of \$ \$27,739,000. The Delaware River Ports have made a strategic landside investment in intermodal facilities. Pennsylvania and the railroads have made commensurate investments in double-stack capability for a growing container demand. A 45-foot channel is integral to the port's accommodation to current fleet/cargoes. Several beneficial, land based and aquatic dredged material disposal areas are available.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Construction	\$10,350,000
Planning, Engineering and Design	\$ 600,000
Construction Management	\$ 1,050,000
Total	\$12,000,000

Division: North Atlantic

District: Philadelphia

Delaware River Main Channel, NJ, PA & DE

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

	Payments during Construction and Reimbursement	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights of way	\$21,200,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	31,000,000	
Reimburse an additional 10 percent of the general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, and relocation provided for commercial navigation.	11,180,000 <u>1/</u>	
Pay 25 percent of the costs allocated to general navigation features during construction	80,800,000	
Total Non-Federal Cost	\$144,180,000	\$0

The non-Federal sponsor has also agreed to repay its share of construction costs during construction and reimburse its share of construction costs over a period of 30 years following completion of construction.

1/Reimbursement reduced to account for credits for lands, easements, and right of way

STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement (PCA) is scheduled to be executed in February 2002. The Delaware River Port Authority is the non-Federal sponsor.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$243,000,000 is an increase of \$12,000,000 from the latest estimate (\$231,000,000) presented to Congress (FY 2002). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	\$12,000,000
Total	\$12,000,000

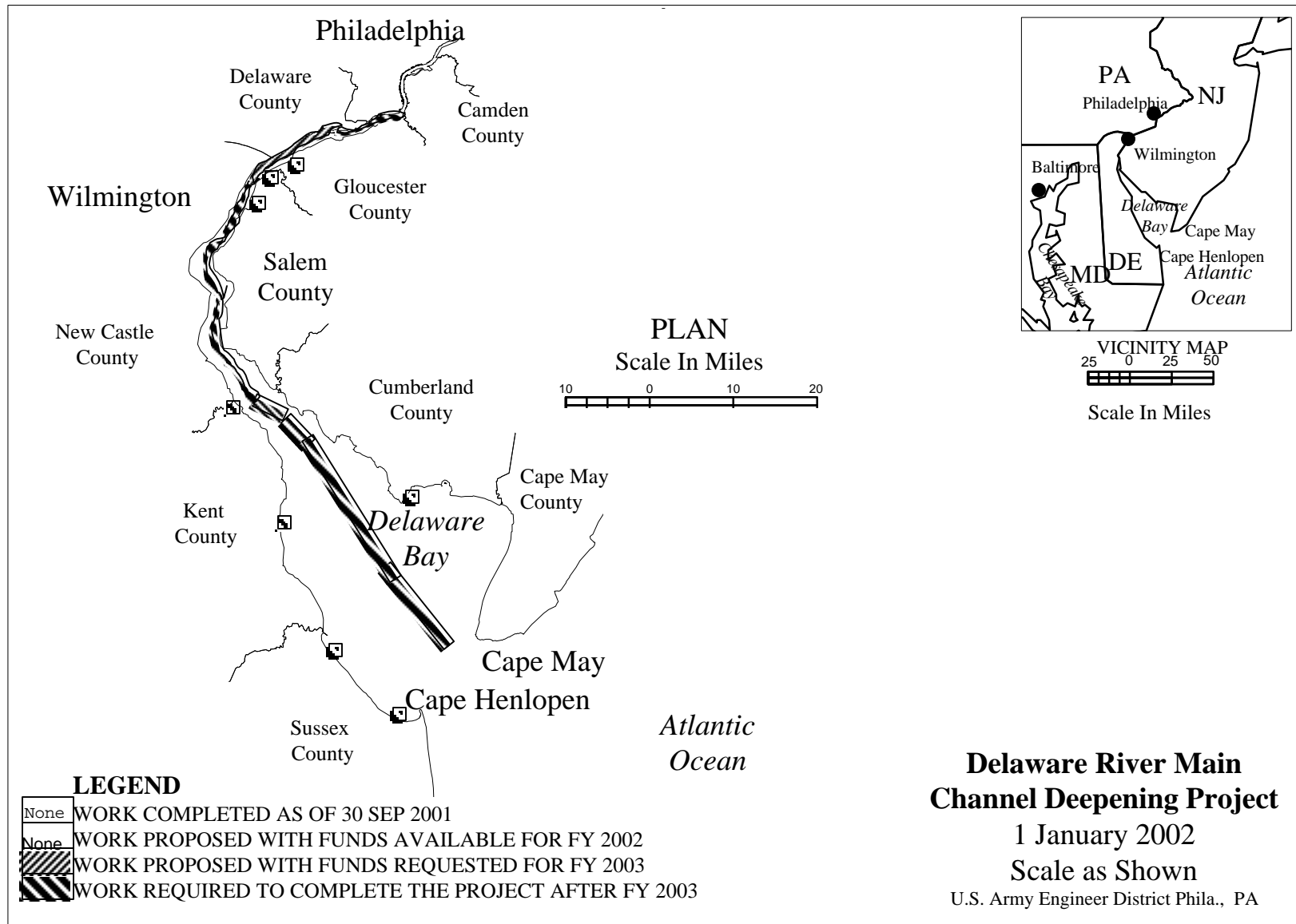
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: As part of the Preconstruction, Engineering, and Design (PED) study a Supplemental Environmental Impact Statement (SEIS) was prepared in December 1996 and made available to the public and agencies. The Final Supplemental Environmental Impact Statement was filed with U.S. Environmental Protection Agency in July 1997, and the Record of Decision was signed in December 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1992 and funds to initiate construction were appropriated in FY 1999.

Division: North Atlantic

District: Philadelphia

Delaware River Main Channel, NJ, PA & DE



APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: New York & New Jersey Harbor, New York and New Jersey (Continuing)

LOCATION: The Port of New York and New Jersey is located within the NY/NJ Harbor Estuary shared between the states of New York and New Jersey and consists of various navigation channels. These channels include: Ambrose Channel; Anchorage Channel; Kill Van Kull and Newark Bay Channel; Arthur Kill Channel; Port Jersey Channel; and, Bay Ridge and Red Hook Channel.

DESCRIPTION: This project consolidates four authorized projects.

1.) The Kill Van Kull and Newark Bay Channels, NY and NJ project consists of deepening existing 40-foot project to 45 feet MLW. Unprogrammed work includes dredging of Pierhead Channel and Port Newark in the vicinity of Port Newark and Port Elizabeth.

2.) The New York Harbor and Adjacent Channels, Port Jersey Channel, NJ project consists of deepening the non-Federal access channel to 41 feet MLW from the Federal Anchorage Channel to its head of navigation, providing a turning basin at the head of navigation, and bulkheading portions of the turning basin.

3.) The Arthur Kill, Howland Hook Marine Terminal, NY and NJ project consists of deepening the existing Federal 35-foot Arthur Kill Channel to 41 feet MLW from its confluence with the Kill Van Kull Channel to Howland Hook Marine Terminal in Staten Island, New York, and to 40 feet MLW from the Howland Hook Marine Terminal to the Tosco Oil Terminal oil facilities, New Jersey and New York, respectively. Also included within the Arthur Kill Channel are selected widenings and realignments. The Arthur Kill Project also provides for mitigation consisting of restoration and enhancement of approximately 23 acres of intertidal salt marsh).

4.) The New York and New Jersey Harbor, NY and NJ, project consists of deepening the Ambrose Channel to 53 feet MLW; the Anchorage Channel, Kill Van Kull, Newark Bay, Port Jersey Channel, Bay Ridge Channel, and the Arthur Kill Channel to Howland Hook to 50 feet MLW and 52 feet MLW if in rock or otherwise hard material. Mitigation for project impacts, turning basins and selective bulkheading are included. All work is programmed.

AUTHORIZATION: Supplemental Appropriations Act of 1985, Water Resources Development Acts of 1986, 1996, 1999, and 2000.

REMAINING BENEFIT - REMAINING COST RATIO: 2.8 to 1 at 6 5/8 percent

TOTAL BENEFIT - COST RATIO: 2.8 to 1 at 6 5/8 percent

INITIAL BENEFIT - COST RATIO: 2.8 to 1 at 6 5/8 percent (FY 2002)

BASIS OF BENEFIT - COST RATIO: The benefit-to-cost ratio shown above applies to the consolidation of the four authorized projects. The analysis reflects annualized costs and benefits, adjusted to October 2000 price levels.

Division: North Atlantic

District: New York

New York & New Jersey Harbor, New York and New Jersey

SUMMARIZED FINANCIAL DATA			ACCUM. CT OF EST FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (CoE)	\$1,761,200,000			Programmed work:		
Programmed Construction	\$1,686,700,000			KVK		
Unprogrammed Construction	74,500,000			Phase I 40 ft.	100	Sep 1995
				Phase II 45 ft.	50	Jun 2006
Estimated Appropriation Requirement (USCG)	4,050,000			Port Jersey Channel	0	Sep 2006
Estimated Total Appropriation Requirement	1,765,250,000			Arthur Kill Channel	0	Sep 2009
				NY & NJ Harbor (50 ft)	0	Sep 2017
Future Non-Federal Reimbursement	293,616,000			Unprogrammed work:		
Programmed Construction	285,244,000			KVK	0	Indefinite
Unprogrammed Construction	8,372,000			Entire Project:	18	Indefinite
				PHYSICAL DATA		
Estimated Federal Cost (Ultimate) (CoE)	1,467,584,000			a. Deepen the Kill Van Kill and Newark Bay from 35 ft to 40 ft then to 45 ft		
Programmed Construction	1,401,456,000			b. Deepen the Port Jersey Channel from 35 ft. to 41 ft.		
Unprogrammed Construction	66,128,000			c. Deepen the Arthur Kill Channel from its confluence with the Newark Bay to the Howland Hook Marine Terminal from 35 ft. to 40 ft and then from 35 ft to 40 ft to the TOSCO Terminal.		
Estimated Non-Federal Cost	1,953,859,000			d. NY & NJ Harbor: Deepen the above channels from their depths to 50 ft., deepen the Ambrose Channel from 45 ft. to 53 ft. the Anchorage Channel from 45 ft. to 50 ft. and the Bay Ridge Channel from 40 ft. to 50 ft. Turning areas are provided for the Bay Ridge, Arthur Kill and Port Jersey Channels, along with mitigation for loss of benthic habitat and air quality.		
Programmed Construction						
Cash Contribution	1,282,678,000					
Other Costs	361,145,000					
Reimbursements: Comm'l Navigation	285,244,000					
Unprogrammed Construction						
Cash Contribution	16,420,000					
Other Costs	0					
Reimbursements	8,372,000					
Total Estimated Programmed Construction Costs	\$3,334,573,000					
Total Estimated Unprogrammed Construction Costs	90,920,000					
Total Estimated Project Cost	3,425,493,000					

Division: North Atlantic

District: New York

New York & New Jersey Harbor, New York and New Jersey

SUMMARIZED FINANCIAL DATA: (continued)

Allocations to 30 September 2001	\$283,378,000	
Conference Allowance for FY 2002	88,500,000	
Allocation for FY 2002	71,355,000	<u>1/</u>
Allocation through FY 2002	354,733,000	20
Allocation Requested for FY 2003	120,000,000	27
Programmed Balance to Complete after FY 2003	1,211,967,000	
Unprogrammed Balance to Complete after FY 2003	74,500,000	

1/ Reflects \$14,145,000 reduction assigned as savings and slippage and \$3,000,000 reprogrammed from the project.

JUSTIFICATION: The Port of New York-New Jersey is the largest port on the East Coast, providing more than 228,000 port related jobs, \$12 billion in economic activity, and serves more than 17 million consumers in the States of New York and New Jersey (35% of the nation). Through its intermodal links, the Port provides second day access to another 80 million consumers in the northeast and mid-western states. The Port annually receives and ships over \$82 Billion (110 million long tons) of waterborne general cargo to all parts of the United States and throughout the world and receives petroleum and related products from ports in the Atlantic, and Gulf Coasts, the Caribbean, Africa, and the Persian Gulf.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Contracts		\$109,275,000
Kill Van Kull and Newark Bay	56,400,000	
NY Harbor and Adjacent Channels, Port Jersey	29,516,000	
Arthur Kill, Howland Hook Marine Terminal	23,359,000	
Planning, Engineering, and Design		3,750,000
Construction Management		6,975,000
Total		\$120,000,000

Division: North Atlantic

District: New York

New York & New Jersey Harbor, New York and New Jersey

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsors must comply with the Requirements listed below:

	Payments During Construction And Reimbursement	Annual Operation, Maintenance and Replacement Costs
REQUIREMENTS OF LOCAL COOPERATION:		
Dredging berthing areas and relocate utilities where necessary in the construction of the project.	\$ 304,662,000	\$205,000
Pay 25-50 percent of the costs allocated to deep draft navigation during construction. <u>1</u> /	1,282,678,000	
Pay for all lands, easements, rights of way and relocations	56,483,000	
Pay an additional 10 percent of the costs allocated to deep draft navigation within a period of 30 years following completion of construction which is partially offset by a credit allowed for the value of lands, easements, rights of way, and relocation	285,244,000	
Contribute 50 percent of the annual charges for interest and amortization of the Federal first cost of the Port Jersey 41-foot project and 50 percent of the operations and maintenance until the improvement is serving/benefiting multiple owners/properties. (Approximately \$3 million annually.) If multiple owners are not established, the contribution could range to a maximum of \$145,629,000.		0
Total Non-Federal Costs	\$1,929,067,000	\$205,000

1/ The cost sharing percentage of this project includes the cost sharing of the general navigation features deepening to 45 feet at 25 percent and deepening of those features from 45 feet to 50 feet at 50%.

Division: North Atlantic

District: New York

New York & New Jersey Harbor, New York and New Jersey

STATUS OF LOCAL COOPERATION:

(1) On the Kill Van Kull and Newark Bay Channels element, a Project Cooperation Agreement for the 45-foot deepening project was executed for the Phase II deepening on 13 January 1999.

(2) On the NY Harbor and Adjacent Channels, Port Jersey Channel element, the State of New Jersey by letter dated 30 July 2001 indicated it would be the primary local sponsor. The Port Authority of NY/NJ has indicated by letter dated 17 January 2001 that it will serve as a limited co-sponsor specifically and limited to the role of providing indemnification. A project cooperation agreement is scheduled to be executed in April 2002.

(3) On the Arthur Kill, Howland Hook Marine Terminal element, The Port Authority of New York and New Jersey is the non-Federal sponsor for the project. The PCA is scheduled to be executed in April 2002.

(4) On New York and New Jersey Harbor element, the Port Authority of NY & NJ by letter dated 27 February 1997 indicated they would be the primary local sponsor. A schedule for execution of the project cooperation agreement is being developed to account for additional engineering and environmental analyses needed to consolidate the 50 foot project with the ongoing elements.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of \$1,761,200,000 is a decrease of \$33,800,000 from the last estimate (\$1,795,000,000) presented to Congress (FY 2002).

This change includes the following item:

ITEM	AMOUNT
Price Escalation on Construction Features	\$ 11,336,000
Other Estimating Adjustments	\$-45,136,000
Total	\$-33,800,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT:

(1) On the Kill Van Kull and Newark Bay Channels element, the Final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (EPA) on 31 July 1981. A Supplemental EIS was filed with EPA on 14 February 1986. The Final Supplement to the EIS was filed with EPA on 13 February 1987. The Record of Decision was executed on 1 April 1987. An Environmental Assessment and Finding of No Significant Impact was issued on 30 April 1997 as part of the LRR for the Phase II deepening.

(2) On NY Harbor and Adjacent Channels, Port Jersey Channel element, the final EIS was filed with the Environmental Protection Agency (EPA) on 29 April 1988, and a final Environmental Assessment and Finding of No Significant Impact was issued June 2000. A Record-of-Decision was executed on 23 October 2000.

(3) On the Arthur Kill, Howland Hook Marine Terminal element, the Final Supplemental Environmental Impact Statement was filed with the Environmental Protection Agency on 16 September 1998. A Final Environmental Assessment for mitigation was issued in May 2001. The Record of Decision was executed on 29 August 2001

(4) On the 50-foot project, New York and New Jersey Harbor Deepening element, the final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (EPA) on 29 December 1999. The Record-of-Decision is scheduled for signature in June 2002.

Division: North Atlantic

District: New York

New York & New Jersey Harbor, New York and New Jersey



OTHER INFORMATION:

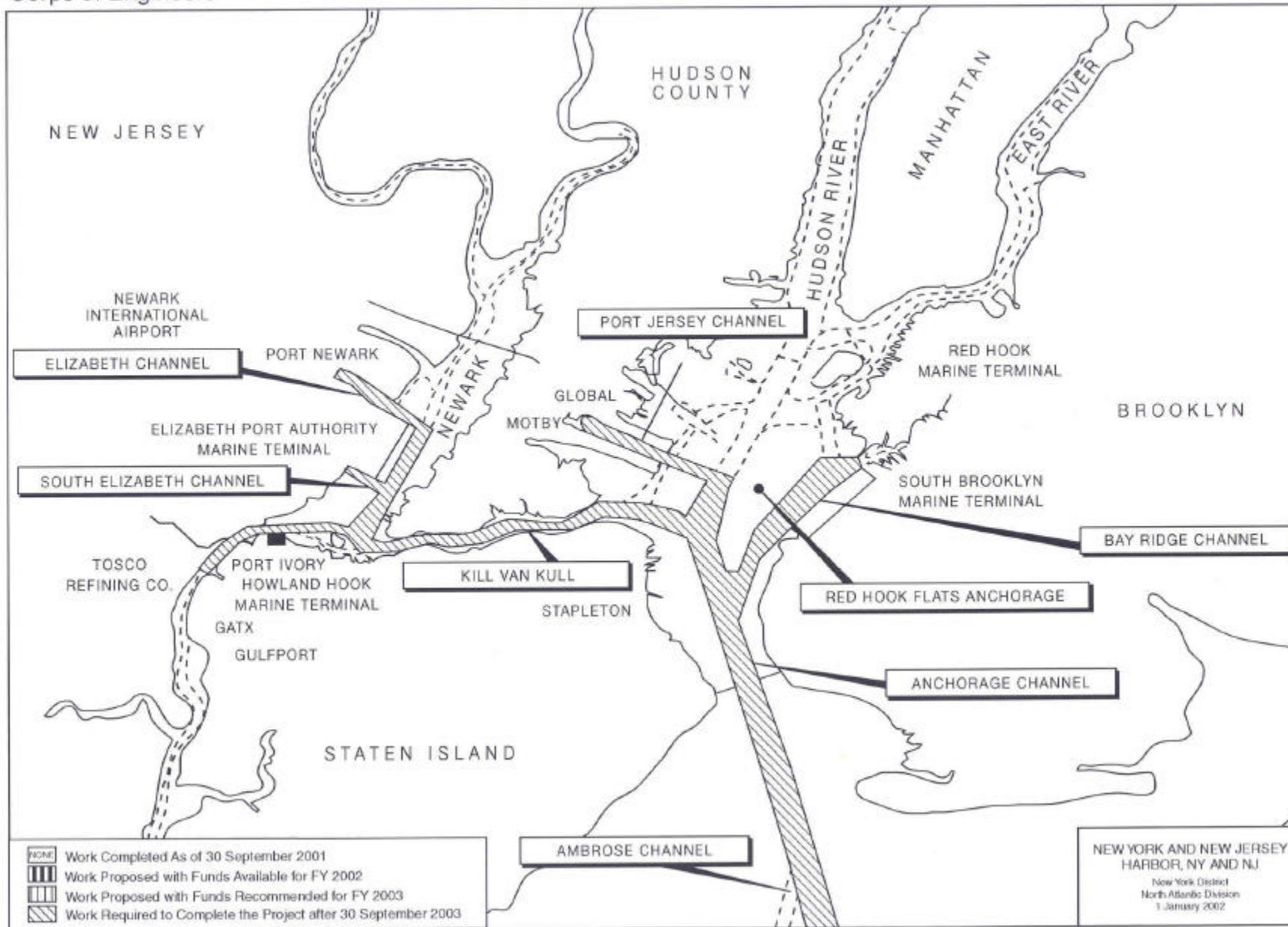
(1) All project elements were being funded separately prior to FY 2002. Congressional direction provided to the Secretary of the Army in the Energy and Water Development Appropriations, FY 2002, Conference Report consolidated the four project elements with the 50-foot deepening project authorized by the Water Resources Development Act of 2000. The Project Management Plan for the consolidated project is scheduled to be completed in August 2002. This plan lays out the construction activities to consolidate ongoing interim depth construction with the overall deepening project. Critical to this analysis is the ongoing extensive close coordination with the States of New York and New Jersey, Port Authority of New York and New Jersey, the Environmental Protection Agency, US Coast Guard, Federal Maritime Administration and other interested agencies and publics. Additional engineering and environmental analyses will be completed before extensive dredging of the 50-foot channels are undertaken. Individual opportunities to advance work, such as consolidated drilling and blasting in the Kill Van Kull channel in FY 2002 are being explored.

(2) On the Kill Van Kull and Newark Bay Channels element, funds to initiate construction were appropriated in FY 1985.

(3) On the NY Harbor and Adjacent Channels, Port Jersey Channel element, funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1994.

(4) On the Arthur Kill, Howland Hook Marine Terminal element, funds for preconstruction engineering and design were appropriated in FY 1986 and funds to initiate construction were appropriated in FY 2001.

(5) On the 50-foot New York and New Jersey Harbor Deepening element, funds to initiate preconstruction engineering and design were appropriated in FY 2000 and funds to initiate construction were appropriated in FY 2002



4 February 2002

102

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Atlantic Intracoastal Waterway Bridge At Great Bridge, Virginia (Continuing)

LOCATION: The project is located in the community of Great Bridge, city of Chesapeake, in the southeastern portion of Virginia. The Atlantic Intracoastal Waterway bridge crosses the Albermarle and Chesapeake Canal which is a part of the Atlantic Intracoastal Waterway that connects the Southern Branch of the Elizabeth River and the North Landing River.

DESCRIPTION: The plan of improvement includes replacement of the existing Federal bridge with a five-lane, double-leaf, rolling-lift bascule also commonly known as a "Scherzer Rolling Lift Bridge." The replacement bridge provides five 12-foot lanes, two 2-foot shoulders and pedestrian walkways. The roadway centerline on the proposed bridge will be approximately 80 feet east of, and parallel to, the existing bridge centerline. Upon completion of the project the non-Federal Sponsor (City of Chesapeake) will assume ownership and provide OMRR and R for the new bridge and approaches.

AUTHORIZATION: Section 339 of the National Highway Systems Designation Act of 1995 (P.L. 104-59).

REMAINING BENEFIT-REMAINING COST RATIO: 2.1 to 1 at 7 3/8 percent

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 7 3/8 percent

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 7 3/8 (FY 1998)

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in July 1994 at October 1992 price levels

Division: North Atlantic

District: Norfolk

Atlantic Intracoastal Waterway  
Bridge At Great Bridge , VA

SUMMARIZED FINANCIAL DATA:		ACCUM PCT. OF EST. FED COST	STATUS (1 Jan 2002) Bridge Replacement	PERCENT COMPLETE 80	PHYSICAL COMPLETION SCHEDULE Aug 2003
Estimated Federal Cost		24,054,000			
Estimated Non-Federal Cost		3,672,000			
Cash Contributions	3,604,000				
Other Costs	68,000				
Total Estimated Project Cost		27,727,000			
Allocations to 30 September 2001		14,772,000			
Conference Allowance for FY 2002		7,000,000			
Allocation for FY 2002		5,881,000	1/		
Allocations through FY 2002		20,653,000		85	
Allocation Requested for FY 2003		3,401,000		100	
Programmed Balance to Complete after FY 2003		0			

1/ Reflects \$1,119,000 reduction assigned as savings and slippage.

JUSTIFICATION: The present bridge, which was built by the Corps of Engineers, was opened to traffic in August 1943. The bridge is now functionally obsolete. It is a double-swing two-lane highway bridge carrying Virginia's Route 168 over the Albermarle and Chesapeake Canal. At the time the bridge was built, it had adequate vehicle capacity for a rural area. However, the bridge now connects a multi-lane highway through a heavily traveled area serving a busy urban commercial center. The bridge is seriously overloaded, carrying over 30,000 vehicles per day, which is double its design capacity. Navigation is also adversely affected due to restrictions on bridge openings. Updating of the mechanical and electrical equipment is now needed. Structural problems have required the bridge to be down-posted from 15 to 13 tons. While maintenance and repairs are an alternative to replacing the bridge, the bridge is over 50 years old, and it is likely that increased cost for repairs or further weight limit downposting is likely as the bridge continues to age.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue construction	\$3,061,000
Construction Management	340,000
Total	\$3,401,000

Division: North Atlantic

District: Norfolk

Atlantic Intracoastal Waterway  
Bridge At Great Bridge, VA

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, rights of way, relocations, and approaches	\$3,672,000	
Pay all costs of betterments to the project	0	
Total Non-Federal Costs	\$3,672,000	\$215,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and will assume ownership and all operation, maintenance, repair, replacement, and rehabilitation responsibilities of the bridge.

STATUS OF LOCAL COOPERATION: The city of Chesapeake is the non-Federal project sponsor. By City Council Resolution dated 8 June 1999 and by letter dated 9 June 1999, the city indicated their support and willingness to enter into a Project Cooperation Agreement (PCA) prior to initiation of construction. In addition, the city agreed to assume ownership and all operation, maintenance, repair, replacement, and rehabilitation responsibilities, and provide the incremental costs of any locally preferred options. The non-Federal sponsor is fully capable of providing its share of funds for the bridge replacement through its City Wide Debt Fund Balance. The PCA was executed on 22 November 1999.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$24,054,000 is the same as the latest estimate (\$24,054,000) presented to Congress (FY 2002).

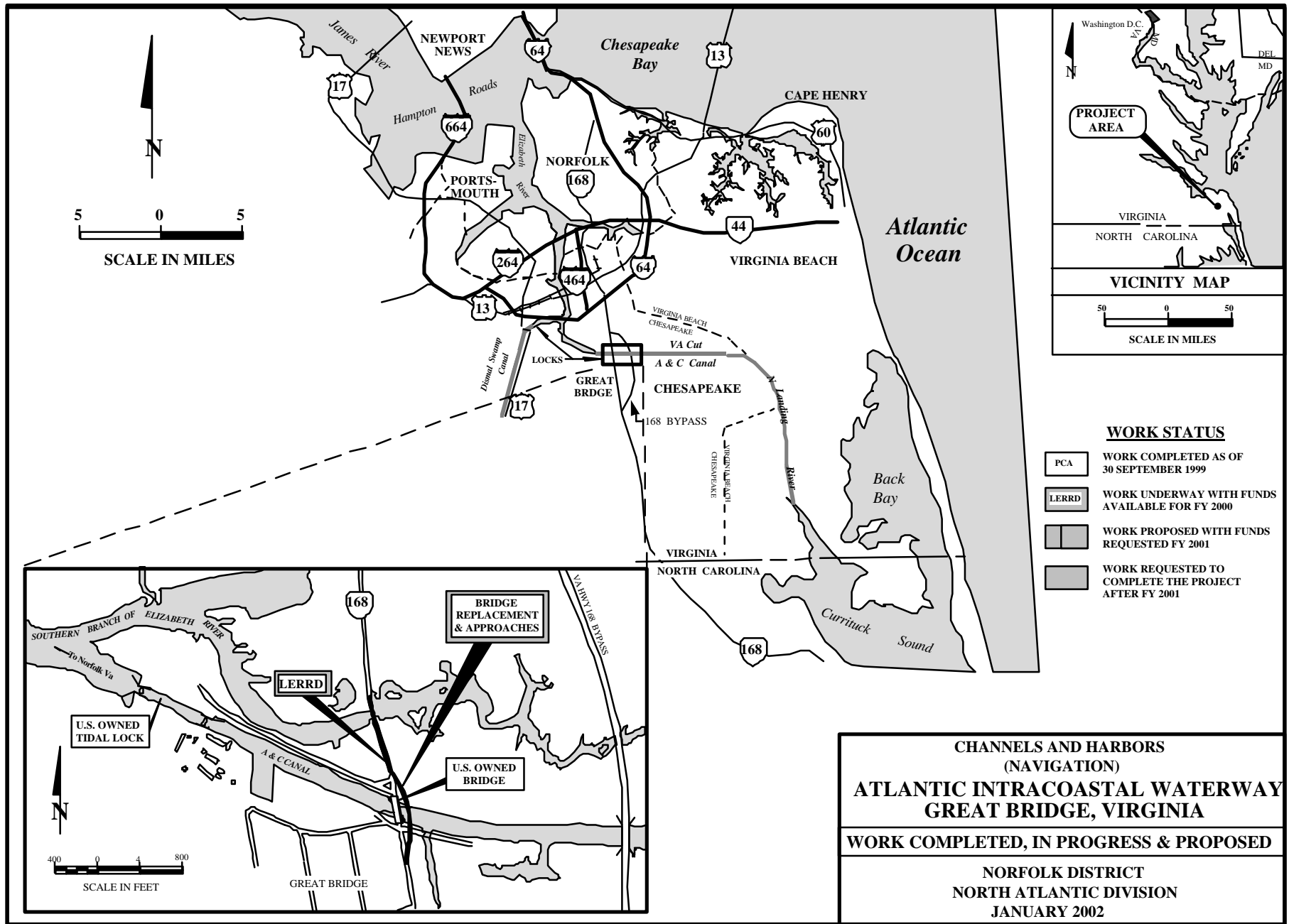
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment/Finding of No Significant Impact (EA/FONSI) was signed on 25 February 1994.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1995. Funds to initiate construction were appropriated in FY 1998.

Division: North Atlantic

District: Norfolk

Atlantic Intracoastal Waterway  
Bridge At Great Bridge, VA



APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Norfolk Harbor and Channels (Deepening), Virginia (Continuing)

LOCATION: The project is located in Hampton Roads, Virginia, a 25-square mile natural harbor serving the ports of Norfolk, Newport News, Portsmouth, Chesapeake, and Hampton, Virginia.

DESCRIPTION: Programmed work encompasses (1) deepening a 2.5 mile section of the Southern Branch of the Elizabeth River from a depth of 35 feet to 40 feet, including an 800 foot turn basin, and (2) the construction of the 50-foot inbound element. Unprogrammed work encompasses deepening the outbound lanes of existing main channels to a depth of 55 feet, constructing a new ocean channel to a depth of 60 feet, and deepening a 6.3 mile section of the Southern Branch to a depth of 45 feet. Dredging the outbound channels to a depth of 50 feet was completed in 1988, the Lower Bay Beneficial Uses Study was completed in August 1994, and the construction of a 1500-foot diameter anchorage area with a depth of 50 feet was completed in September 1999.

AUTHORIZATION: Supplemental Appropriations Act of 1985 and Water Resources Development Act of 1986.

REMAINING BENEFIT-COST RATIO: 1.6 to 1 at 8 1/8 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 8 1/8 percent.

INITIAL BENEFIT-COST RATIO: 3.7 to 1 at 8 1/8 percent (FY 1985).

BASIS OF BENEFIT-COST RATIO: Benefits are from the General Design Memorandum approved in July 1986 at October 1986 price level and the Supplemental Engineering Report approved in August 1989 at October 1989 price level. Benefits for the 50-Foot Anchorage are from the Limited Reevaluation Report dated May 1996 at October 1996 price level.

Division: North Atlantic

District: Norfolk

Norfolk Harbor and Channels (Deepening), VA

SUMMARIZED FINANCIAL DATA		STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (CoE)	137,400,000			
Programmed Construction	21,312,000	50-Foot Outbound	100	Dec 1988
Unprogrammed Construction	116,088,000	50-Foot Outbound (Anchorage)	100	Sep 1999
		50-Foot Inbound	2	Indefinite
		55-Foot Outbound	0	Indefinite
Estimated Appropriation Requirement (Coast Guard)	833,000	55-Foot Outbound (Anchorage)	0	Indefinite
Programmed Construction	306,000	Southern Branch 45-Foot	0	Indefinite
Unprogrammed Construction	527,000	Southern Branch 40-Foot	25	Indefinite
		Entire Project	20	Indefinite

		PHYSICAL DATA		
		DEPTH	WIDTH	LENGTH
		(feet m.l.w.)	(feet)	(miles)
Estimated Appropriation Requirement (US Navy)	3,508,000	CHANNELS		
Programmed Construction	3,508,000	Atlantic Ocean	60	650
Unprogrammed Construction	0	Thimble Shoal	55	650
		Norfolk Harbor	55	650-800
Estimated Total Appropriation Requirement	141,741,000	Newport News	55	800
Programmed Construction	25,126,000	Elizabeth River and		
Unprogrammed Construction	116,615,000	Southern Branch	45	375-750
		Southern Branch	40	250-500
Future Non-Federal Reimbursement	11,362,000			
Programmed Construction	928,000			
Unprogrammed Construction	10,434,000	ANCHORAGES	DEPTH	RADIUS
			(feet m.l.w.)	(feet)
Estimated Federal Cost (Ultimate) (CoE)	126,038,000	55-Foot	55	1,500
Programmed Construction	20,384,000	Sewells Point	45	1,500
Unprogrammed Construction	105,654,000	50-Foot	50	1,500
Estimated Non-Federal Cost	132,321,000			
Programmed Construction	17,049,000			
Cash Contribution	11,719,000			
Other Costs	3,968,000			
Reimbursements	1,362,000			

Division: North Atlantic

District: Norfolk

Norfolk Harbor and Channels (Deepening), VA



SUMMARIZED FINANCIAL DATA (Continued)

Unprogrammed Construction	115,272,000
Cash Contribution	80,152,000
Other Costs	25,120,000
Reimbursements	10,000,000

Total Estimated Programmed Construction Cost	40,153,000
Total Estimated Unprogrammed Construction Cost	222,547,000
Total Estimated Project Cost	262,700,000

Allocations to 30 September 2001	23,916,000	
Conference Allowance for FY 2002	486,000	
Allocation for FY 2002	486,000	<u>1/</u>
Allocations Through FY 2002	24,324,000	18
Allocation Requested for FY 2003	477,000	20
Programmed Balance to Complete after FY 2003	334,000	
Unprogrammed Balance to Complete after FY 2003	111,710,000	

1/ Reflects \$78,000 reduction assigned as savings and slippage and \$78,000 reprogrammed to the project

JUSTIFICATION: The existing channels in the Port of Hampton Roads are not deep enough to accommodate the increasing vessel sizes which transport principal commodities such as coal and grain. Hampton Roads coal terminals already receive colliers in excess of 100,000 deadweight tons which cannot sail fully loaded with the existing channels 50 feet deep, making unit transportation costs higher. When the project is completed, larger vessels will be able to load to capacity, providing a savings in the delivery of cargo to final destinations. The project will assist in improving the United States competitive position as a major coal exporter. The purpose of constructing the 50-Foot Inbound Channels is to prepare the port for the anticipated growth in the U.S. maritime container trade well into the next century and projected trend toward the utilization of increasingly larger container vessels. Average annual benefits are as follows:

Annual Benefits	Amount
Transportation Savings (50-Foot Outbound)	\$26,400,000
Transportation Savings (55-Foot Outbound)	22,200,000
Transportation Savings (Southern Branch 45 foot)	3,499,000
Transportation Savings (Southern Branch 40 foot)	2,550,000
Total	\$54,649,000

Division: North Atlantic

District: Norfolk

Norfolk Harbor and Channels (Deepening), VA

ACCUM.  
PCT. OF EST.  
FED COST

FISCAL YEAR 2003: The requested amount will be applied as follows:

Planning, Engineering, and Design (50Foot Inbound)	\$477,000
Total	\$477,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation 50-Foot Outbound Element and Long-term Disposal:		
Pay Craney Island dredged material disposal area tolls	642,000	
Pay the costs of improvements to access channels and berthing areas (\$2,987,000) and relocate a 30 inch diameter water main (\$339,000).	3,326,000	
Pay 50 percent of the costs allocated to deep draft navigation greater than 45 feet during construction and pay 25 percent of the costs of incremental maintenance below 45 feet below mean low water.	9,545,000	150,000
Pay an additional 10 percent of the costs allocated to deep draft navigation within a period of 30 years following completion of construction (which is partially offset by relocation of the 30 inch diameter water main and a credit allowed for the Craney Island dredged material area tolls).	928,000	
Subtotal Non-Federal Costs (50-Foot Outbound Element)	\$14,441,000	\$150,000

Division: North Atlantic

District: Norfolk

Norfolk Harbor and Channels (Deepening), VA

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation (Cont'd) 50-Foot Anchorage Element:		
Pay 50 percent of the costs allocated to deep draft navigation greater than 45 feet during construction and pay 25 percent of the costs of incremental maintenance below 45 feet below mean low water.	2,174,000	31,000
Pay an additional 10 percent of the costs allocated to deep draft navigation within a period of 30 years following completion of construction.	434,000	
Subtotal Non-Federal Costs (50-Foot Anchorage Element)	\$2,608,000	\$31,000

NON-FEDERAL COST (Continued)

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation (Cont'd)		
Remaining Elements:		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	2,620,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.	22,500,000	
Pay 50 percent of the costs allocated to deep draft navigation greater than 45 feet during construction and pay 25 percent of the costs of incremental maintenance below 45 feet mean low water.	80,152,000	
Pay an additional 10 percent of the costs allocated to deep draft navigation within a period of 30 years following completion of construction.	10,000,000	
Subtotal Non-Federal Costs (Remaining Elements)	\$115,272,000	\$ 0
Total Non-Federal Costs	\$132,321,000	\$181,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and reimburse its share of construction costs over a period of 30 years following completion of construction.

Division: North Atlantic

District: Norfolk

Norfolk Harbor and Channels (Deepening), VA

STATUS OF LOCAL COOPERATION: A Local Cooperation Agreement (LCA) for the first phase (50 foot Outbound) was executed 15 May 1986 with the Commonwealth of Virginia, and LCA Modification No. 1 was executed 13 February 1987 to reflect the criteria of the Water Resources Development Act of 1986. A Project Cooperation Agreement for the 50-Foot Anchorage was executed 19 February 1999 with the Commonwealth of Virginia. Supplements to the existing LCA will be executed to accommodate completion of future elements.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (CoE) cost estimate of \$137,400,000 is the same as the latest estimate (\$137,400,000) presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (FEIS) and Addendum were filed on 3 April 1981. A final Supplement I to the FEIS was filed on 14 June 1985. An Environmental Assessment for the 50-Foot Anchorage was completed in March 1996.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1985. Funds to initiate the 50-foot anchorage area were appropriated in FY 1998. The first phase of the project provided an outbound channel 50 feet deep. The remainder of the project will be programmed in coordination with local interests. A long-term dredged material management study was initiated in FY 1985. This study concentrated on the needs of the inner harbor and was completed in FY 1994.



APPROPRIATION TITLE: Construction, General -Navigation Mitigation and Hurricane and Storm Damage Reduction

PROJECT: Delaware Bay Coastline, Roosevelt Inlet to Lewes Beach, DE (Continuing)

LOCATION: Project area is located in Sussex County in Southern Delaware at the entrance to the Delaware Bay. Sussex County is one of three counties in the State of Delaware. It is bordered on the east by the Atlantic Ocean, on the south and west by Maryland, and on the north by Kent County. The study area of Lewes Beach which is situated between the Lewes and Rehoboth Canal and Delaware Bay consists of 2 miles of beach from Roosevelt Inlet to the Cape May-Lewes Ferry Terminal.

DESCRIPTION: The plan for the purposes of navigation mitigation and hurricane and storm damage reduction consists of a 25-foot wide berm at an elevation of +8.0 feet NAVD, and a dune at an elevation of +14.0 feet NAVD over a total project length of 1,400 feet. The total project width of the berm and dune, including side slopes, is 100 feet. The plan includes dune grass, dune fencing and suitable advance beachfill and periodic nourishment every six years over the 50-year project life to ensure the integrity of the design. The plan also provides for reconstruction of the south jetty at Roosevelt Inlet.

AUTHORIZATION: Section 101 (a ) (13) of WRDA 1999.

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 to 1 at 6 5/8 percent

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 6 5/8 percent

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 6 5/8 percent (FY 2002)

BASIS OF BENEFIT-COST RATIO: Benefits and costs (October 1998 price level) are based on the Chief of Engineers Report dated 03 February 1999.

Division: North Atlantic      District: Philadelphia      Delaware Bay Coastline, Roosevelt Inlet to Lewes Beach, DE

## SUMMARIZED FINANCIAL DATA

STATUS:  
(1 Jan 2002)PERCENT  
COMPLETECOMPLETION  
SCHEDULE

Estimated Federal Cost		\$	32,100,000
Initial Construction	3,040,000		
Periodic Nourishment	29,060,000		
Estimated non-Federal Cost		\$	9,400,000
Initial Construction	909,500		
Cash Contributions	891,400		
Other Costs	18,100		
Periodic Nourishment	8,490,500		
Cash Contributions	8,490,500		
Other Costs	0		
Total Estimated Project Cost		\$	41,500,000
Initial Construction	3,949,500		
Periodic Nourishment	37,550,500		

Initial Beachfill	0	Sept 2004
Periodic Nourishment	0	Sept 2053
Entire Project	0	Sept 2053

## PHYSICAL DATA:

Berm: 25-foot wide at an elevation of +8.0 feet NAVD and elevation of +14.0 feet NAVD over total project length of 1,400 feet.

Dune: Dune grass and dune fencing

Periodic Nourishment: every 6 years

## ACCUMULATED

Allocations to 30 September 2001	413,000	PCT OF EST.
Conference Allowance for FY 2002	500,000	FED. COST
Allocation for FY 2002	420,000 <u>1/</u>	
Allocations through FY 2002	833,000	3
Allocations Requested for FY 2003	500,000	4
Programmed Balance to Complete after FY 2003	30,767,000	
Unprogrammed Balance to Complete after FY 2003	0	

1/ Reflects \$80,000 reduction assigned as savings and slippage.

JUSTIFICATION: Federal navigation works in the vicinity of Lewes Beach are the primary cause of the shoreline erosion at Lewes Beach. These navigation works include a breakwater that provides a harbor of refuge inside Cape Henlopen and jetties and a navigation channel at Roosevelt Inlet. The Federal navigation works have interrupted the natural longshore sand transport, resulting in accelerated shoreline erosion at Lewes Beach. The impacts of the Federal navigation works leave the community of Lewes Beach at a greater risk to damages from hurricanes and coastal storms.

Progressive and constant erosion is evident in certain areas of the bay shoreline. Despite shore protection measures undertaken by both the Federal Government and the State of Delaware, sections of the shoreline in the study area continue to erode. Long term erosion of the beachfront along the Delaware Bay has resulted in a persistent reduction in storm damage protection. The proximity of roads to the shoreline and the concentration of homes in Lewes Beach can result in significant economic damages in the event of a major storm. The highest elevation of water recorded for Lewes, DE was 7.1 feet (NAVD) for the March 1962 northeaster. Storm damages were estimated at \$5.4 million at that time along the Delaware bayshore communities. Storm damages at Lewes Beach were estimated at \$1.6 million.

Division: North Atlantic

District: Philadelphia

Delaware Bay Coastline, Roosevelt Inlet to Lewes Beach, DE



JUSTIFICATION: (continued)

Average annual benefits are \$602,000 (Oct. 1998 price level). Average annual benefits are as follows:

Annual Benefits	Amount
Storm Damage Reduction	\$ 47,000
Local Costs Foregone	\$378,000
Reduced Federal Maintenance Dredging Costs	\$177,000
Total	\$602,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

Initiate Construction	\$ 423,000
Planning, Engineering and Design	10,000
Construction Management	67,000
Total	\$ 500,000

Division: North Atlantic

District: Philadelphia

Delaware Bay Coastline, Roosevelt Inlet to Lewes Beach, DE

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

	Payments during Construction and Reimbursement	Annual Operation, Maintenance, and Replacement Costs
Provide 35 percent of the initial construction costs assigned to the non-mitigation portion of the project for hurricane and storm damage reduction and, for the impacts attributable to Federal navigation works, share in the costs in the same proportion as the cost sharing provisions applicable to the project causing the erosion impacts (26 percent of project costs assigned to mitigation of jetty impacts).	\$891,400	
Provide all lands, easements, rights-of-way, and relocations.	18,100	
Provide during construction 35 percent of each periodic nourishment costs assigned to the non-mitigation portion of the project for hurricane and storm damage reduction and, for the impacts attributable to Federal navigation works, share in the periodic nourishment costs in the same proportion as the cost sharing provisions applicable to the project causing the erosion impacts (26 percent of project costs assigned to mitigation of jetty impacts).	8,490,500	
Bear all costs of operation, maintenance, repair, replacement, and rehabilitation of the completed project.		\$17,000
Total Non-Federal Cost	\$9,400,000	\$17,000

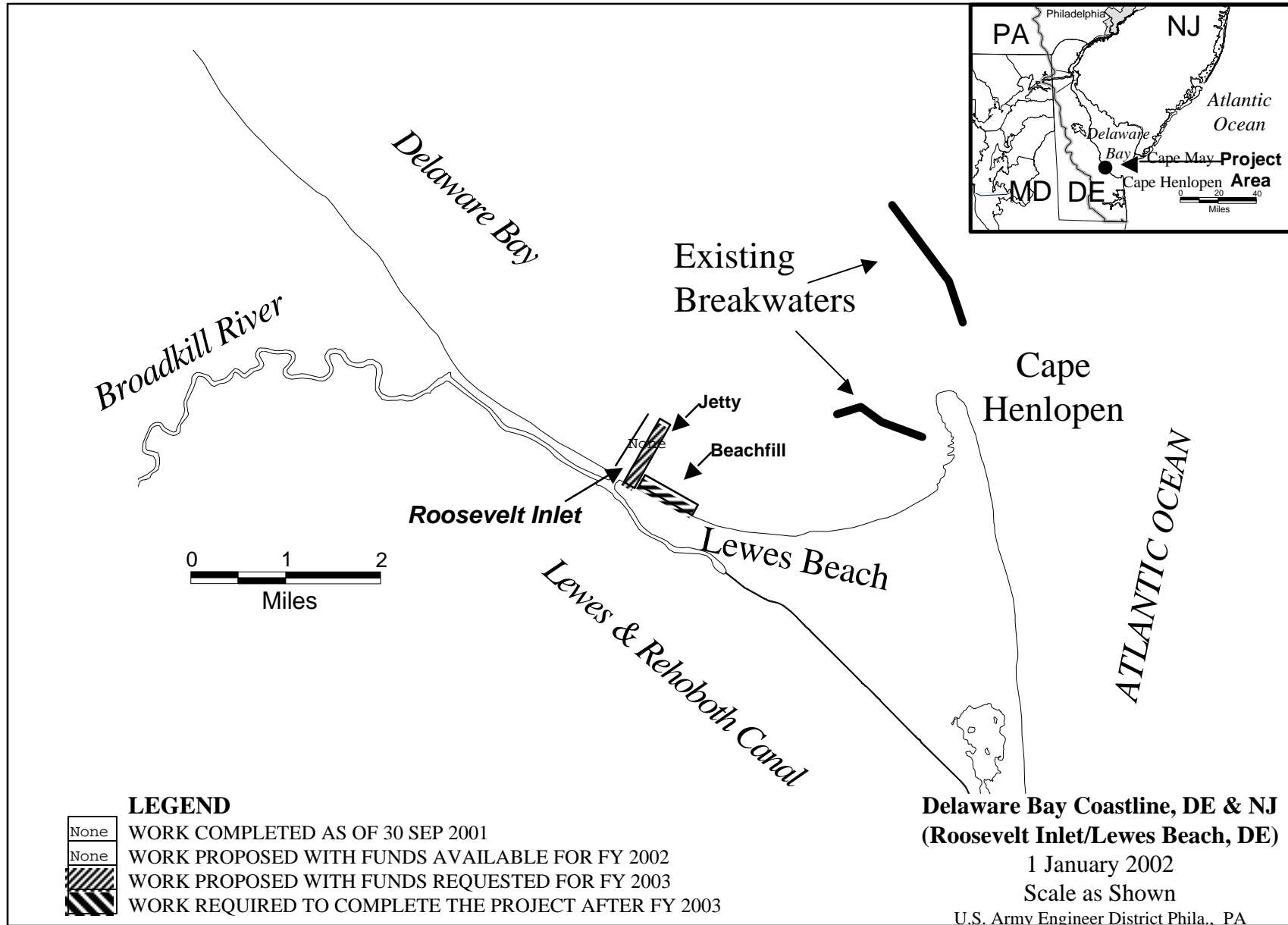
STATUS OF LOCAL COOPERATION: The Delaware Department of Natural Resources & Environmental Control(DNREC) is the non-Federal sponsor. The Project Cooperation Agreement (PCA) is schedule to be executed by March 2003.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$32,100,000 is the initial cost estimate being presented to Congress and reflects the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Assessment was completed in May 1997.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1999. Funds to initiate construction were appropriated in FY 2002.

Division: North Atlantic District: Philadelphia Delaware Bay Coastline, Roosevelt Inlet to Lewes Beach, DE



APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Delaware Coast Protection, Delaware (Continuing)

LOCATION: The project is located in Sussex County, Delaware, on the Atlantic Ocean at Indian River Inlet.

DESCRIPTION: The plan of improvement consists of constructing a sand bypassing plant and periodic nourishment of a feeder beach at Indian River Inlet. All work is programmed.

AUTHORIZATION: Flood Control Act of 1968 and the Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable because initial construction is complete.

TOTAL BENEFIT-COST RATIO: Not applicable because initial construction is complete.

INITIAL BENEFIT - COST RATIO: 2.0 to 1 at 6 1/8 percent (FY 1977).

BASIS OF BENEFIT-COST RATIO: Atlantic Coast of Delaware General Design Memorandum, approved January 1986 at October 1984 price levels and a Reevaluation Report approved February 1984 at October 1983 price levels.

SUMMARIZED FINANCIAL DATA		STATUS: (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$16,300,000		
Initial Construction	2,266,000	Initial Construction	100	Jan 1990
Periodic Nourishment	14,034,000	Periodic Nourishment	38	Sept 2021
Estimated non-Federal Cost		19,100,000		
Initial Construction	441,000	Entire Project	61	Sept 2021
Cash Contributions	441,000			
Other Costs	0	PHYSICAL DATA:		
Periodic Nourishment	18,659,000	Project Area Length: 3,500 feet sand bypass		
Cash Contributions	0	plant designed to provide the necessary		
Other Costs	18,659,000	volume of sand to the feeder beach. Feeder		
		beach requires bypassing an average		
		of 100,000 cubic yards each year.		
Total Estimated Project Cost		35,400,000		
Initial Construction	2,707,000			
Periodic Nourishment	32,693,000			

Division: North Atlantic

District: Philadelphia

Delaware Coast Protection, DE

ACCUM.  
PCT. OF EST.  
FED. COST

SUMMARIZED FINANCIAL DATA (Continued):

Allocations to 30 September 2001	5,597,000	
Conference Allowance for FY 2002	353,000	
Allocation for FY 2002	353,000 <sup>1</sup> /	
Allocations through FY 2002	5,950,000	37
Allocation Requested for FY 2003	294,000	38
Programmed Balance to Complete after FY 2003	10,056,000	
Unprogrammed Balance to Complete after FY 2003	0	

<sup>1</sup>/Reflects 56,000 reduction assigned as savings and slippage and 56,000 reprogrammed to the project.

JUSTIFICATION: The reach of shoreline immediately north of Indian River Inlet, commonly referred to as the feeder beach, is being damaged by erosion, and State Highway Route 1 is threatened. The project area has also experienced considerable erosion from waves due to hurricanes and northeasters as a result of the lack of adequate protective beaches. The critical length of shoreline north of Indian River Inlet along which erosion threatens Route 1 is extremely important because it provides the only direct roadway between Bethany Beach and the northern beaches. There would be severe negative social and economic impacts if Route 1 were to be cut by a washover. The authorized project would provide tangible benefits by providing beach erosion control measures which in turn reduce annual beach erosion maintenance costs and reduce wave damages from coastal storms. The average annual benefits, are \$9,549,20 based on 1 October 1984 price levels of which \$9,121,100 is for prevention of erosion damages and \$428,100 are for prevention of loss of land.

FISCAL YEAR 2003: The requested funding will be used to provide periodic nourishment through the operation of a sand bypass plant. The funds will be applied as follows:

Periodic Nourishment	\$256,000
Planning, Engineering and Design	\$ 27,000
Construction Management	\$ 11,000
Total	\$294,000

Division: North Atlantic

District: Philadelphia

Delaware Coast Protection, DE

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal Sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Bear all costs of operation, maintenance and replacement of shoreline protection features.		\$120,000
Bear 35 percent of cost allocated to periodic Nourishment.	19,100,000	
Bear 100 percent of operation, maintenance, and replacement for mitigation of shore damages attributable to navigation projects.		\$203,000
Total non-Federal Costs	\$19,100,000	\$323,000

STATUS OF LOCAL COOPERATION: A Local Cooperation Agreement was executed in October 1988 with the State of Delaware. The current non-Federal estimated cash contribution of \$19,100,000 for programmed work reflects an increase of \$1,100,000 from the estimate of \$18,000,000 included in the Local Cooperation Agreement. The non-Federal sponsor has indicated that it is financially capable and willing to contribute the increased non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$16,300,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$12,600,000) presented to Congress (FY 2002) includes the following items:

Item	Amount
Price Escalation on Construction Features	\$2,000,000
Change in Assumed Cost Share	1,700,000
Total	\$3,700,000

Division: North Atlantic

District: Philadelphia

Delaware Coast Protection, DE

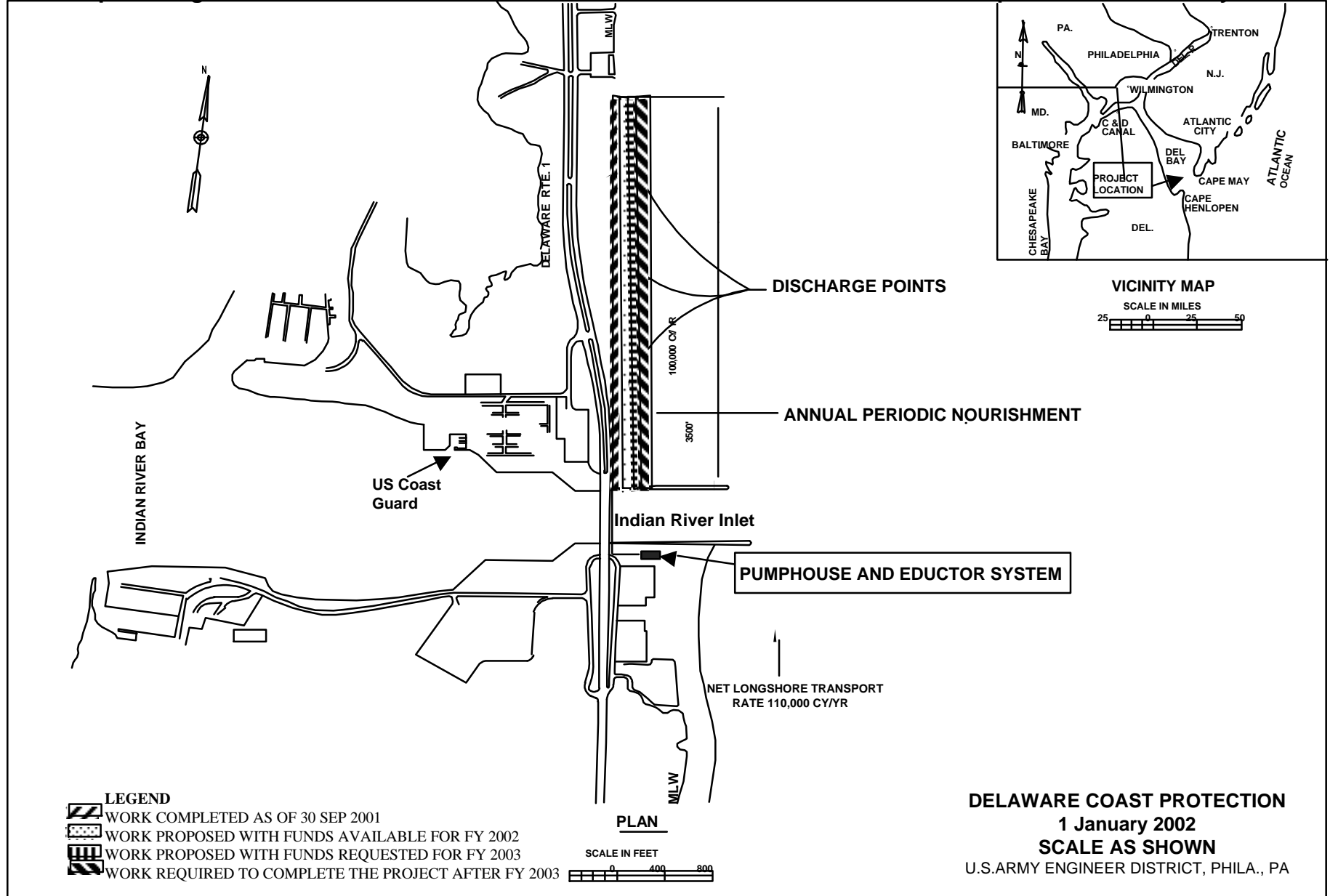
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement (FEIS) was filed with the Council on Environmental Quality on 1 June 1971. A draft supplement to the FEIS was filed on 18 April 1975. An Environmental Assessment and a Finding of No Significant Impact were completed on 26 November 1984. Listing of Piping Plover (*Charadrius Melodus*) as an endangered bird species in January 1986 and recent determination by State wildlife officials that the species nests in the project area has necessitated review procedures in accordance with Section 7 of the Endangered Species Act of 1973. A letter from U.S. Fish and Wildlife Service, dated 4 May 1987, expressed that the project operations would cause no impact, provided an operational window is observed. Coordination with the Service is continuing.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1971, and funds to initiate construction were appropriated in FY 1977. Section 869 of the Water Resources Development Act of 1986 deauthorized the unprogrammed portion of the project.

Division: North Atlantic

District: Philadelphia

Delaware Coast Protection, DE





APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Delaware Coast, Rehoboth Beach to Dewey Beach, DE (Continuing)

LOCATION: The Rehoboth Beach to Dewey Beach project area stretches for approximately 2 miles along the northern part of the Atlantic Ocean coast of Delaware in Sussex County, Delaware. From north to south the project area includes the Town of Rehoboth Beach, the unincorporated region in front of Silver Lake (under Sussex County jurisdiction), and the Town of Dewey Beach.

DESCRIPTION: The recommended project consists of providing 1.4 million cubic yards initial beachfill, with subsequent nourishment of 360,000 cubic yards every three years. Berm widths will be 125 and 150 feet at an elevation of +8.0 feet NGVD for Rehoboth Beach and Dewey Beach respectively, with dunes at elevation of +14.0 feet NGVD. The project length is 13,500 feet.

AUTHORIZATION: Water Resources Development Act of 1996 and Water Resources Development Act of 2000.

REMAINING BENEFIT-REMAINING COST RATIO: 1.7 to 1 at 7 1/8 percent

TOTAL BENEFIT-COST RATIO: 1.7 to 1 at 7 1/8 percent

INITIAL BENEFIT-COST RATIO: 1.7 to 1 at 7 1/8 percent (FY 2000)

BASIS OF BENEFIT-COST RATIO: Benefits (October 1995 price level) are from the Chief of Engineers Report dated 23 December 1996.

Division: North Atlantic

District: Philadelphia

Delaware Coast, Rehoboth Beach to Dewey Beach, DE

SUMMARIZED FINANCIAL DATA		STATUS: (1 Jan 2002)	PERCENT 1COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$ 109,000,000	Initial Beachfill	0	Sept 2004
Initial Construction	7,867,000	Periodic Nourishment	0	Sept 2053
Periodic Nourishment	101,133,000	Entire Project	0	Sept 2053
Estimated non-Federal Cost	\$ 61,000,000	PHYSICAL DATA:		
Initial Construction	7,345,000	Beachfill: Rehoboth Beach-125 foot wide berm at an		
Cash Contributions	4,144,000	elevation of +8 feet NGVD and dune at an elevation of		
Other Costs	3,201,000	+14 feet NGVD: Dewey Beach-150 foot wide berm at an		
Periodic Nourishment	53,655,000	elevation of +8 feet NGVD and dune at an elevation		
		of +14 feet NGVD: Dune grass, dune fence.		
Cash Contributions	53,655,000	Periodic Nourishment: every 3 years with a		
Other Costs	0	placement of approx. 360,000 cubic yards of		
Total Estimated Project Cost	\$170,000,000	material.		
Initial Construction	15,212,000	ACCUMULATED		
Periodic Nourishment	154,788,000	PCT OF EST.		
		FED. COST		
Allocations to 30 September 2001	937,000			
Conference Allowance for FY 2002	100,000			
Allocation for FY 2002	84,000	1/		
Allocations through FY 2002	1,021,000		1	
Allocations Requested for FY 2003	1,000,000		2	
Programmed Balance to Complete	106,979,000			
after FY 2003				
Unprogrammed Balance to Complete	0			
after FY 2003				

1/ Reflects 16,000 reduction assigned as savings and slippages.

JUSTIFICATION: The project area has been subject to major flooding, erosion and wave attack during storms, causing damage to structures, and, since 1992, twice resulting in the Rehoboth Beach/Dewey Beach area being declared a National Disaster Area. In recent years, continued erosion has resulted in a reduction of the height and width of the beachfront, including the virtual destruction of the existing dune system, which has increased the potential for storm damage. Storms of record that have caused significant damage occurred in August 1933, September 1944, and March 1962. Damages to 544 residences and 50 businesses, at an estimated cost of \$4 million resulted, from the March 1962 storm. In addition, winter northeasters often buffet the coastline resulting in erosion and associated losses. The most notable of these occurred in December 1974, October 1977, March 1984, March 1989, October 1991, January 1992, December 1992, and January 1996. Average annual benefits are \$3,476,000 at Oct. 1995 price levels

Division: North Atlantic

District: Philadelphia

Delaware Coast, Rehoboth Beach to Dewey Beach, DE

FISCAL YEAR 2003: The requested amount will be applied as follows:

Initiate Construction	\$ 766,000
Construction Management	\$ 234,000
Total	\$ 1,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights of way	\$ 1,405,000	\$ 65,000
Relocation utilities, roads, bridges and Other facilities, where necessary for the Construction of the project.	\$ 1,796,000	
Pay 35 percent of the initial costs allocated to hurricane and storm damage reduction & 35% of the cost of periodic nourishment.	\$ 57,779,000	
Total Non-Federal Costs	\$ 61,000,000	\$ 65,000

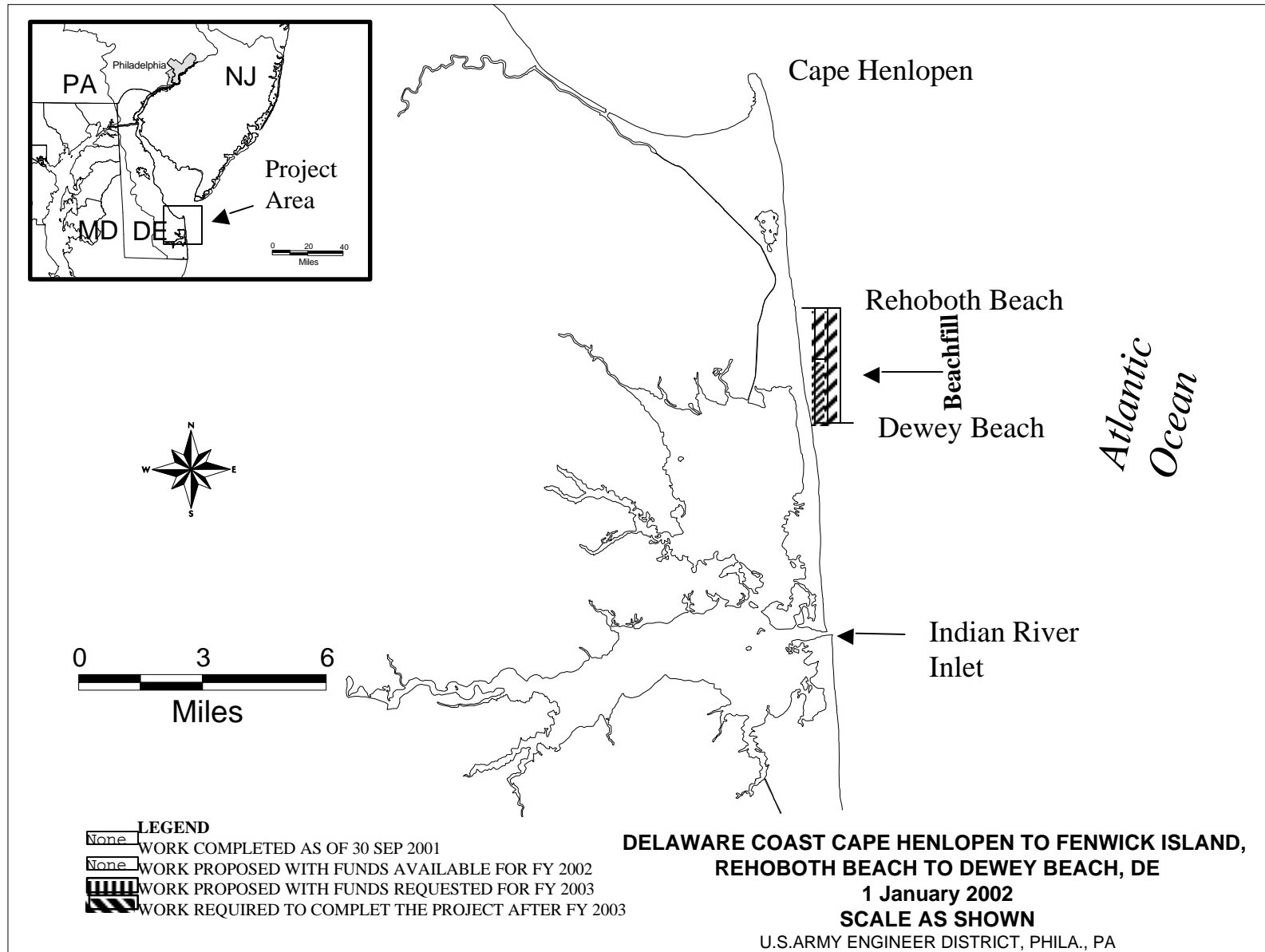
STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of Delaware. A Project Cooperation Agreement with the State of Delaware is scheduled to be executed in September 2002.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$109,000,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$64,900,000) presented to Congress (FY 2002) includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 1,200,000
Change in Assumed Cost Share	42,900,000
Total	\$ 44,100,000

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1998. Funds to initiate construction were appropriated in FY 2000.

Division: North Atlantic      District: Philadelphia      Delaware Coast, Rehoboth Beach to Dewey Beach, DE



APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Assateague Island, Maryland (Continuing)

LOCATION: The Town of Ocean City and adjacent areas of Worcester County comprise an area of 625 square miles including Assateague Island, Ocean City Inlet, and Chincoteague, Sinepuxent, Assawoman, and Isle of Wight Bays on the eastern shore of Maryland. Adjacent to Ocean City is the Assateague Island National Seashore and Assateague Island State Park.

DESCRIPTION: The project involves the short-term and long-term restoration of Assateague Island. Short-term work includes dredging of about 1.8 million cubic yards from Great Gull Bank and placing it on the Island in the area between 1.6 miles and 7.2 miles south of the jetty. Long-term work includes mobile bypassing of 185,000 cubic yards of sand annually. The project area is composed of 4.7 miles of National Park Service and 0.9 miles of State of Maryland land.

AUTHORIZATION: Water Resources Development Act of 1996

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT - COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA	ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (COE)	38,450,000			
Estimated Appropriation Requirement (OFA)	25,250,000	Initial construction	25	Sep 2006
Total Estimated Construction Cost	\$63,700,000 <u>1/</u>	(short-term)		
Allocations to 30 September 2001	607,000	Long-term	0	Sep 2028
Conference Allowance for FY 2002	10,000,000			
Allocation for FY 2002	5,585,000 <u>2/</u>			
Allocations through FY 2002	6,192,000	16		PHYSICAL DATA:
Allocation Requested for FY 2003	6,900,000	34		Environmental Restoration
Programmed Balance to Complete				Assateague Island - 5.6 miles x 95 foot width
after FY 2003	25,358,000			
Unprogrammed balance to Complete				
after FY 2003	0			

1/ Section 534 of the Water Resources Development Act of 1996 authorized \$35 million to be appropriated.

2/ Reflects \$1,598,000 reduction assigned as savings and slippage and \$2,817,000 reprogrammed from the project.

Division: North Atlantic

District: Baltimore

Assateague Island, MD

JUSTIFICATION: Existing Federal, state and local projects combined with development and agriculture have caused extensive degradation to the Ocean City and vicinity environment, particularly the coastal bays. It is estimated that nearly 2000 acres of tidal wetland habitat, and thousands of acres of non-tidal wetland habitat have been lost in the coastal bay watershed. Construction of Corps navigation channels through the inlet, harbor and back bays have contributed to the degradation of approximately 265 acres of benthic habitat. Construction of the jetties by the Corps of Engineers in 1934 to stabilize the Ocean City Inlet interrupted the natural longshore transport of sand from Ocean City to Assateague, starving the northern end of Assateague Island. The northern 1.5-7 miles of Assateague has eroded at an accelerated rate since 1933. It is estimated that the induced erosion rate for this section of the island was 10.8 feet per year. The island is now at severe risk of breaching which would change the dynamics of the area resulting in adverse physical, biological, and economic impacts in the area and threaten the habitat of several endangered species such as the piping plover.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Dredging/restoration	
at Assateague Island	\$5,763,000
Planning, Engineering and Design	667,000
Construction Management	470,000
Total	\$6,900,000

NON-FEDERAL COSTS: None.

STATUS OF LOCAL COOPERATION: The sponsor for the project is the National Park Service who administers the Assateague Island National Seashore. The National Park Service is providing lands, easements and rights-of-way for the initial construction work and will cost share 50% of the long-term work. An agreement between the Park Service and the Corps was executed in September 2001. The project is strongly supported by the State of Maryland, Worcester County, and the Town of Ocean City.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of \$38,450,000 is an increase of \$12,650,000 from the latest estimate (\$25,800,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 8,650,000
Other Estimating Adjustments	4,000,000
Total	\$12,650,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A draft Environmental Impact Statement was incorporated in the draft Integrated Interim Report dated May 1997. The final Environmental Impact Statement was incorporated in the final feasibility report completed in June 1998.

Division: North Atlantic

District: Baltimore

Assateague Island, MD

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2001. The current appropriation limit of \$35 million will not allow for completion of the long term work.

Due to two severe storms in January/February 1998, the Corps performed emergency work at Assateague Island in September 1998 to correct an erosion problem that threatened to breach the Island. Work involved placement of about 150,000 cubic yards of sand at a total cost of \$2.1 million.

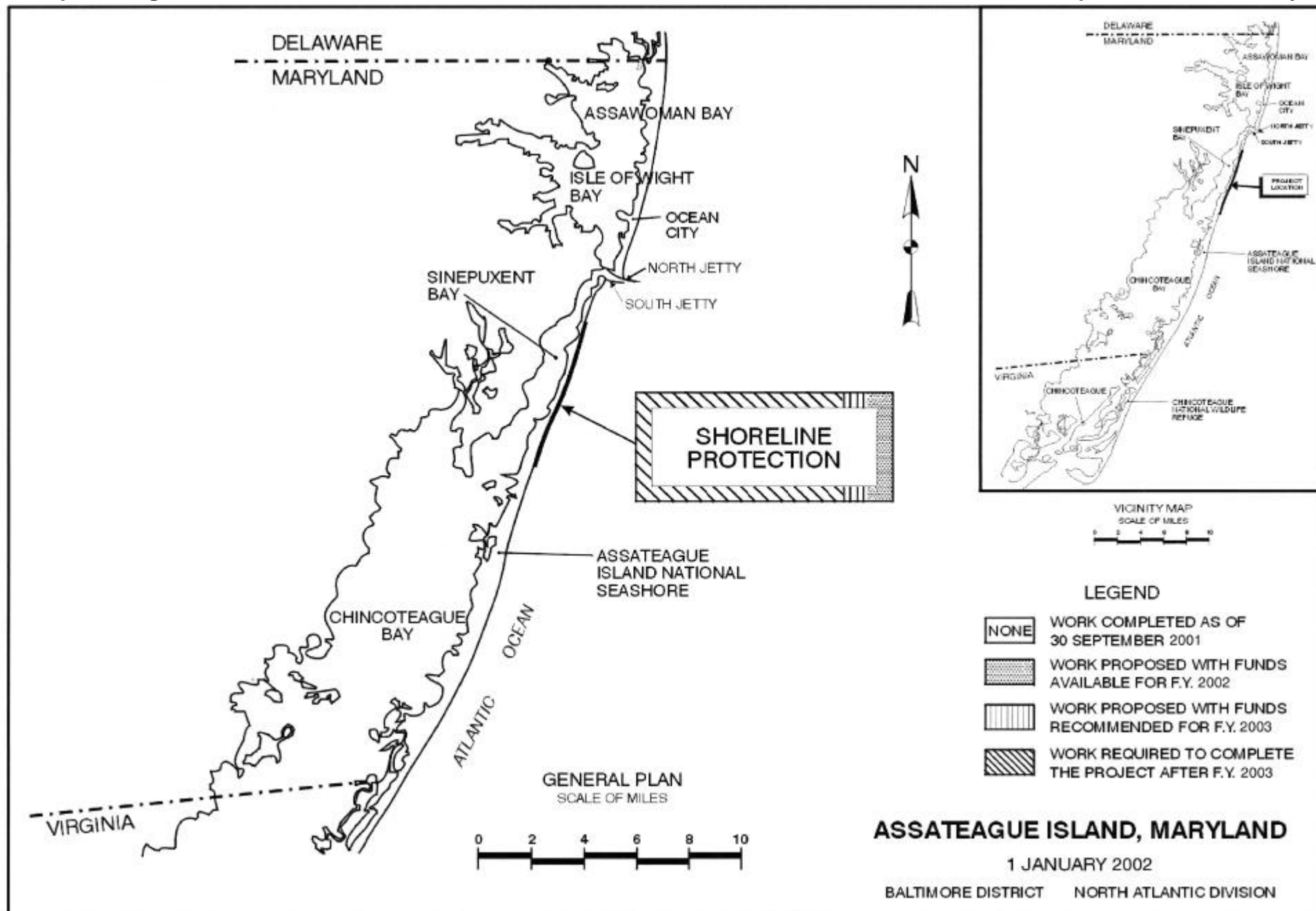
Division: North Atlantic

District: Baltimore

Assateague Island, MD

4 February 2002

131





APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Atlantic Coast of Maryland (Continuing)

LOCATION: Fenwick and Assateague Islands form the Atlantic Coast of Maryland and extend in a north-south direction from Delaware Bay to Chincoteague Inlet, Virginia. The project is located in Worcester County, Maryland.

DESCRIPTION: The project includes a dune beginning at 27th Street extending north to the Delaware line, a steel sheet pile bulkhead from 27th Street south to Fourth Street, a widened and raised beach from Third Street to just beyond the Delaware line, and periodic nourishment over the 50-year project life. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986 modified by the Energy and Water Development Appropriations Act of 1990.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable because initial construction is complete.

TOTAL BENEFIT - COST RATIO: Not applicable because initial construction is complete.

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 8 5/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Benefits are from the General Design Memorandum completed in October 1989 at October 1989 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETE SCHEDULE
Estimated Federal Cost	\$270,300,000				
Initial Construction	\$ 29,172,000		Initial Construction	100	Dec 1994
Periodic Nourishment	241,128,000		Periodic Nourishment	2	Sep 2044
			Entire Project	9	Sep 2044

Division: North Atlantic

District: Baltimore

Atlantic Coast of Maryland

SUMMARIZED FINANCIAL DATA: (CONT'D)

Estimated Non-Federal Cost 229,700,000

Initial Construction		15,709,000
Cash Contributions	\$15,175,000	
Other Costs	534,000	
Periodic Nourishment		213,991,000
Cash Contributions	213,991,000	
Other Costs	0	

PHYSICAL DATA

Steel Bulkhead	- 1.5 miles
Sand Dune	- 6.7 miles
Beach	- 1.5 miles x 165 feet wide
	- 6.7 miles x 100 feet wide
	- 0.3 mile transition into Delaware

Total Estimated Project Cost	\$500,000,000
Initial Construction	44,881,000
Periodic Nourishment	455,119,000

Allocations to 30 September 2001	34,951,000	
Conference Allowance for FY 2002	4,271,000	
Allocation for FY 2002	3,588,000	<u>1/</u>
Allocations through FY 2002	38,539,000	14
Allocation Requested for FY 2003	200,000	14
Programmed Balance to Complete after FY 2003	231,561,000	
Unprogrammed Balance to Complete after FY 2003	0	

1/Reflects \$683,000 reduction assigned as savings and slippage.

JUSTIFICATION: Fenwick Island (Ocean City, MD) is highly developed since it is the primary ocean resort for the metropolitan centers of Washington, DC and Baltimore, MD. The Ocean City portion of the shore with its highly developed recreation facilities contributes greatly to the economy of the State and to a lesser extent the nation. The current value of development in Ocean City is over \$2 billion. Major portions of Ocean City's beaches have been subjected to erosion which has averaged about 2 feet per year over the past 130 years. This reach of shoreline is subject to severe damage from high tides and wave attack during major storms such as occurred in the hurricane of August 1993 and in the northeast storm of March 1962, with estimated damages of \$76.1 million. Since 1962, significant development has occurred in the damage prone area. Damages to the public and private property at Ocean City from Hurricane Gloria in September 1985 were estimated at \$11.9 million. Severe beach erosion was also caused by the remnants of Hurricane Juan in November 1985 with damages estimated at \$944,000. On 30 and 31 October 1991, and 9 and 10 November 1991, Atlantic storms hit the northeast coast; however, only minor damage occurred at Ocean City as a result of the essentially

Division: North Atlantic

District: Baltimore

Atlantic Coast of Maryland

JUSTIFICATION: (continued)

completed project. Damages prevented by the project were estimated at about \$32 million. On 4 and 5 January 1992 a more devastating storm hit Ocean City causing about \$300,000 in property damages. Damages prevented by the project during that storm were estimated at \$61 million. The average annual benefits, essentially all storm damage reduction, are \$13,712,000 based on 1 October 1989 price levels.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Planning, Engineering and Design	\$200,000
Total	\$200,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, rights of way, and dredged material disposal areas.	\$ 494,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges) and other facilities, where necessary in the construction of the project.	40,000	
Pay 35 percent of the first costs and 47 percent of the cost of periodic nourishment based on a formula that requires payment of 35 percent of the costs assigned to storm damage reduction and 100 percent of the costs assigned to recreation; and bear all costs of operation, maintenance, replacement, and major rehabilitation of storm damage reduction facilities.	229,166,000	\$1,656,000
Total Non-Federal Costs	229,700,000	\$1,656,000

STATUS OF LOCAL COOPERATION: The State of Maryland is the local sponsor for the project. The Local Cooperation Agreement was executed in March 1990. To date, the State of Maryland has fully complied with local requirements on the project.

Division: North Atlantic

District: Baltimore

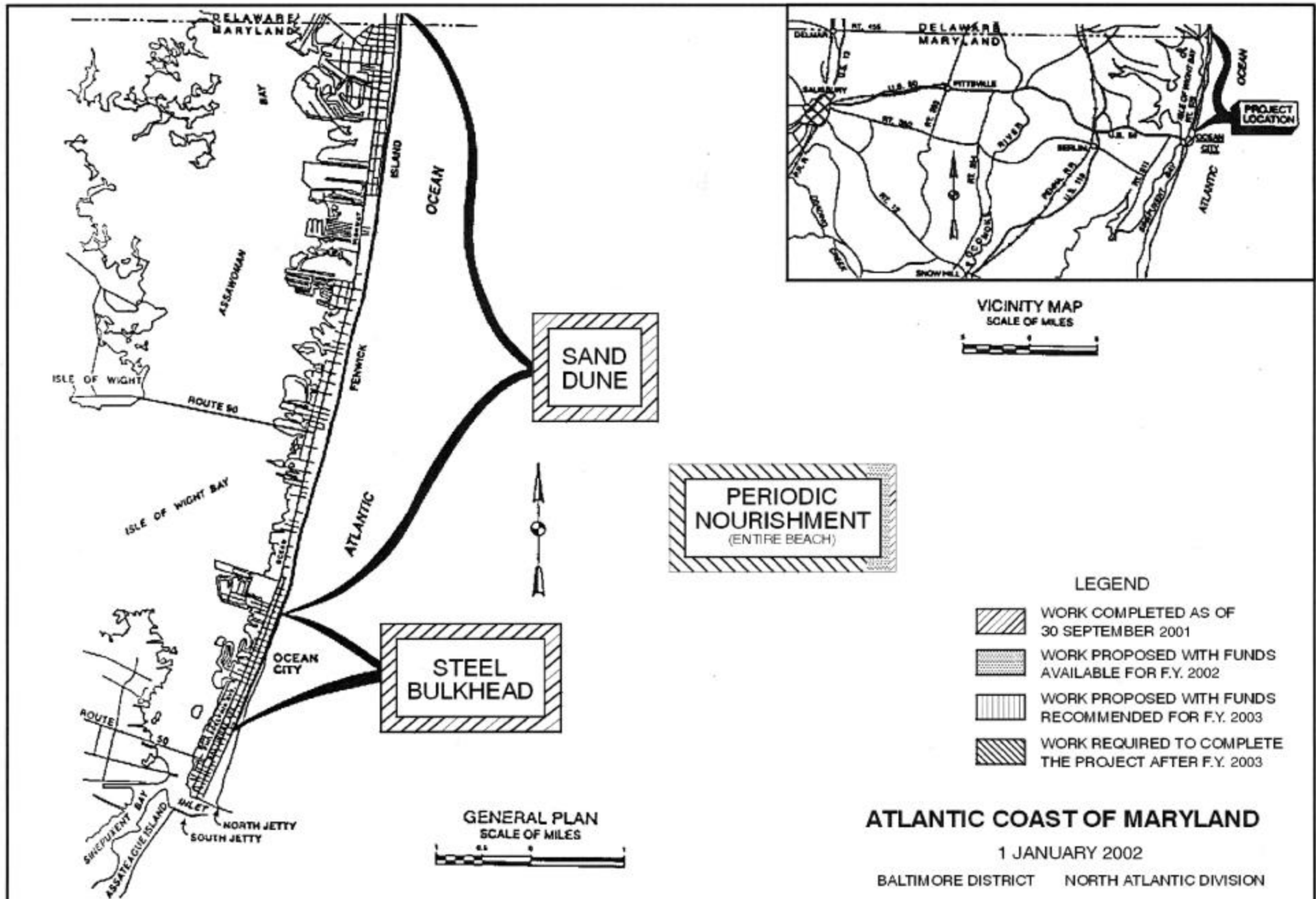
Atlantic Coast of Maryland

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$270,300,000 includes a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$189,000,000) presented to Congress (FY 2002) includes the following item:

ITEM	AMOUNT
Change in Assumed Cost Share	\$81,300,000
Total	\$81,300,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Environmental Protection Agency in May 1981. An environmental assessment dated June 1989 is included in the final General Design Memorandum.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986. Funds to initiate construction were appropriated in FY 1990.



APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Brigantine Inlet to Great Egg Harbor Inlet, NJ (Absecon Island, NJ) (Continuing)

LOCATION: This project is located along Atlantic Coast of New Jersey, approximately 50 miles east of Philadelphia, Pennsylvania.

DESCRIPTION: The recommended project consists of providing 6.2 million cubic yards of initial beachfill, with subsequent periodic nourishment of 1.6 million cubic yards every three years, for a 200-foot-wide berm at elevation 8.5 feet above mean low water and a dune to elevation 16 feet above mean low water for Atlantic City, and a 100-foot-wide berm at elevation 8.5 feet above mean low water and a dune to 14 feet above mean low water for Ventnor, Margate and Longport along 8.1 miles of shoreline. The plan also includes 0.3 miles of bulkhead construction along the Absecon Inlet frontage of Atlantic City.

AUTHORIZATION: Section 101(b)(13) of WRDA 1996

REMAINING BENEFIT-REMAINING COST RATIO: 1.9 to 1 at 7 1/8 percent

TOTAL BENEFIT-COST RATIO: 1.9 to 1 at 7 1/8 percent

INITIAL BENEFIT-COST RATIO: 1.9 to 1 at 7 1/8 percent (FY 2000)

BASIS OF BENEFIT-COST RATIO: Brigantine Inlet to Great Egg Harbor Inlet, Absecon Island Interim Feasibility study. The Chief Report is dated December 1996.

SUMMARIZED FINANCIAL DATA		STATUS: (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$533,000,000	0	Sept 2008
Initial Construction	42,801,000	Periodic Nourishment	0	Sept 2053
Periodic Nourishment	490,199,000	Bulkhead	0	Sept 2008
		Entire Project	0	Sept 2053

Division: North Atlantic

District: Philadelphia

Brigantine Inlet to Great Egg Harbor Inlet, NJ  
(Absecon Island)

SUMMARIZED FINANCIAL DATA: (Continued)

Estimated non-Federal Cost	\$287,000,000
Initial Construction	23,046,000
Cash Contributions	21,928,000
Other Costs	1,118,000
Periodic Nourishment	263,955,000
Cash Contributions	263,955,000
Other Costs	0
Total Estimated Project Cost	\$820,000,000
Initial Construction	65,847,000
Periodic Nourishment	754,153,000

PHYSICAL DATA: 200-foot-wide berm at elevation +8.5 feet NGVD and a dune to elevation +16 feet for Atlantic City, and a 100-foot-wide berm at elevation +8.5 feet NGVD and a dune to +14 feet for Ventnor, Margate and Longport along 8.1 miles of shoreline. The plan also includes 0.3 miles of bulkhead construction along the Absecon Inlet frontage of Atlantic City. Initial placement of 6.2 million cubic yards of sand. Periodic Nourishment: every 3 years with a placement of approx. 1.6 million cubic yards of material

Allocations to 30 September 2001	1,374,000	ACCUMULATED
Conference Allowance for FY 2002	1,000,000	PCT OF EST.
Allocation for FY 2002	840,000	<u>1/</u> FED. COST
Allocations through FY 2002	2,214,000	0
Allocations Requested for FY 2003	500,000	1
Programmed Balance to Complete after FY 2003	530,286,000	
Unprogrammed Balance to Complete after FY 2003	0	

1/. Reflects \$160,000 reduction assigned as savings and slippage

JUSTIFICATION: The area has been subject to major flooding, erosion and wave attack during storms, causing damage to structures, and since 1992, was twice declared a National Disaster Area. In recent years, continued erosion has resulted in a reduction of the height and width of the beachfront, which has increased the potential for storm damage. The project provides average annual benefits of \$3,476,000 at an annual cost of \$1,988,000, resulting in a benefit to cost ratio of 1.7 to 1 (October 1995 price level).

FISCAL YEAR 2003: The requested amount will be applied as follows:

Initiate Construction	\$ 445,000
Planning, Engineering, and Design	40,000
Construction, Management	15,000
Total	500,000

Division: North Atlantic

District: Philadelphia

Brigantine Inlet to Great Egg Harbor Inlet, NJ  
(Absecon Island)

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, and rights of way	\$ 133,000	
Relocation utilities, roads, bridges and Other facilities, where necessary for the Construction of the project.	985,000	
Pay 35 percent of the initial costs allocated to hurricane and storm damage reduction and cost of periodic nourishment and monitoring.	285,882,000	
Total Non-Federal Costs	\$287,000,000	

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of New Jersey Department of the Environmental Protection (NJDEP). The Project Cooperation Agreement is scheduled to be executed in September 2002.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$533,000,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$290,000,000) presented to Congress (FY 2002) includes the following items:

Item	Incremental Change
Price Escalation on Construction Features	\$ 17,000,000
Change in Assumed Cost Share	226,000,000
Total	\$243,000,000

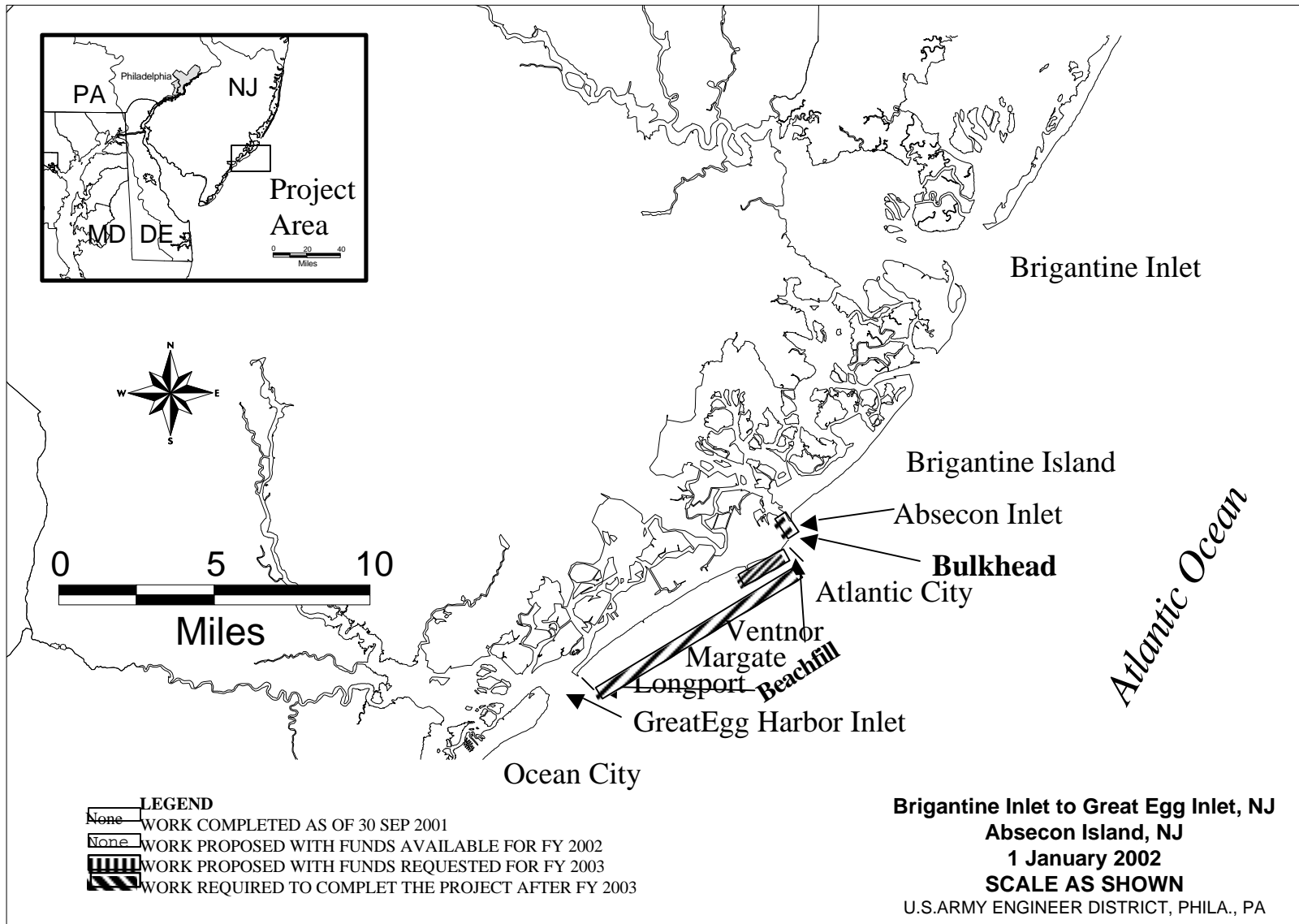
OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2000.

Division: North Atlantic

District: Philadelphia

Brigantine Inlet to Great Egg Harbor Inlet, NJ  
(Absecon Island)





APPROPRIATION TITLE: Construction General - Beach Erosion Control

PROJECT: Cape May Inlet to Lower Township, New Jersey (Continuing)

LOCATION: The site of the recommended project is located on the Atlantic Coast of New Jersey, approximately 38 miles southwest of Atlantic City. It includes the communities of Cape May City including the United States Coast Guard Training Center and Lower Township in Cape May County.

DESCRIPTION: The plan of improvement consists of construction of two groins and placing beachfill and periodic nourishment which are programmed and the construction of a weir breakwater which is unprogrammed.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because initial construction is complete.

TOTAL BENEFIT-COST RATIO: Not applicable because initial construction is complete.

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 8 5/8 percent (FY 1986).

BASIS OF BENEFIT-COST RATIO: Cape May Inlet to Lower Township, New Jersey, Benefits Reevaluation Report approved March 1988 at June 1987 price levels.

SUMMARIZED FINANCIAL DATA			STATUS: (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost (COE)		87,400,000	Initial Construction	100	June 1991
Programmed Construction		80,150,000	Breakwaters	0	Indefinite <u>1</u> /
Initial Construction	5,930,000		Entire Project	25	Sept 2041
Periodic Nourishment	74,220,000				
Unprogrammed Construction		7,250,000			
Initial Construction	7,250,000				
Periodic Nourishment	0				

PHYSICAL DATA:  
Beachfill: Elev +8 Feet (NGVD), 25-180 foot width  
Groins: 7 existing and 2 new groins, 360-786 feet  
Weir Breakwater: 2,560 linear feet rubble mound  
Periodic Nourishment: 180,000 cubic yards per year

1/ Completion of the breakwater element is indefinite pending a decision to construct this feature.

Division: North Atlantic

District: Philadelphia

Cape May Inlet to Lower Township, NJ

SUMMARIZED FINANCIAL DATA (Continued)

Estimated Federal Cost (USCG)			\$54,900,000
Programmed Construction		50,905,000	
Initial Construction	3,458,000		
Periodic Nourishment	47,447,000		
Unprogrammed Construction		3,995,000	
Initial Construction	3,995,000		
Periodic Nourishment	0		
Estimated Non-Federal Cost			9,700,000
Programmed Construction		8,891,000	
Initial Construction		656,000	
Cash Contributions	656,000		
Other Costs	0		
Periodic Nourishment		8,235,000	
Cash Contributions	8,235,000		
Other Costs	0		
Unprogrammed Construction		809,000	
Initial Construction		809,000	
Cash Contributions	809,000		
Other Costs	0		
Total Estimated Programmed Construction		139,946,000	
Initial Construction	10,044,000		
Periodic Nourishment	129,902,000		
Total Estimated Unprogrammed Construction Cost		12,054,000	
Initial Construction	12,054,000		
Periodic Nourishment	0		
Total Estimated Project Cost			\$152,000,000
Initial Construction	22,098,000		
Periodic Nourishment	129,902,000		

Division: North Atlantic

District: Philadelphia

Cape May Inlet to Lower Township, NJ

4 February 2002

143

		ACCUM. PCT. OF EST. FED COST
SUMMARIZED FINANCIAL DATA (Continued)		
Allocations to 30 September 2001	16,250,000	
Conference Allowance for FY 2002	2,000,000	
Allocation for FY 2002	2,000,000	<u>1/</u>
Allocations through FY 2002	18,250,000	21
Allocations Requested for FY 2003	82,000	21
Programmed Balance to Complete after FY 2003	61,818,000	
Unprogrammed Balance to Complete after FY 2003	7,250,000	

1/ Reflects \$320,000 reduction assigned as savings and slippage and \$320,000 reprogrammed to the project.

JUSTIFICATION: The project area has experienced substantial erosion since the construction of the Cape May Inlet jetties in 1911 by the Federal Government. The jetties interrupt the natural movement of sand along the coast which serves to replenish downdrift beach areas. The City of Cape May and State of New Jersey have spent nearly \$4 million since 1945 to combat the resulting erosion. This erosion has left Cape May with little or no protective beach, thus endangering many hotels, small businesses, prominent homes, and a U.S. Coast Guard Training Center. This project would partially restore the beaches of Cape May lost as the direct result of the Cape May Inlet jetties. The potential for future storm damages and maintenance of the seawall would be greatly reduced. The commercial tourism industry would also be enhanced by the provision of sufficient beach area for recreational usage. The project prevented approximately \$9 million worth of damages during the 3-5 January 1992 storm, and approximately \$500,000 in damages during the 7-8 January 1996 storm.

Federal facilities have existed at the present site since the establishment of a U.S. Navy Section Base in 1918. The U.S. Coast Guard became the sole occupant in 1948 when the Recruit Training Center was transferred from Florida. In addition to being the sole site for Coast Guard recruit training for the entire nation, the site also includes a Group/Air Station complex, a Search and Rescue Station, a small boat maintenance facility, and berths for four cutters ranging from 82 to 210 feet in length. The Commandant of the U.S. Coast Guard (USCG) offered to seek funds to support a cost-shared project with the Corps of Engineers, because of the erosion at the Training Center and the need for a cooperative effort to solve the problem. The average annual benefits are \$3,993,000 at June 1987 price levels. These include annual storm damage reduction benefits of \$2,977,000, reduced annual maintenance costs of \$160,000, and annual recreation benefits of \$856,000.

Division: North Atlantic

District: Philadelphia

Cape May Inlet to Lower Township, NJ

Fiscal Year 2003: The requested amount will be applied as follows:

Planning, Engineering and Design	82,000
Total	\$ 82,000

NON-FEDERAL COST: In accordance with Section 101 of the Water Resources Development Act of 1986, costs of constructing measures for mitigation of erosion damages attributable to the Federal navigation project at Cape May Inlet shall be shared in the same proportion as the cost sharing provisions applicable to the original project at Cape May Inlet. The original project was constructed at a Federal cost of approximately \$900,000 with a local contribution of \$100,000. The distribution of initial costs between the USCG and Cape May City is based on the ratio of benefits accrued by the feeder beach between the two locations. Costs for the remaining features of the recommended project will be allocated to Cape May City. The non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Reimbursement Costs
Make cash contributions equal to 10 percent of the initial construction cost and 10 percent of future periodic nourishment and monitoring.	\$ 8,891,000	

Total Non-Federal Costs	\$ 8,891,000	\$0
-------------------------	--------------	-----

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of New Jersey. A Memorandum of Agreement with the USCG was executed on 4 August 1988. A Local Cooperation Agreement with the State of New Jersey was executed on 31 October 1988.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate (Corps of Engineers) of \$87,400,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$53,400,000) presented to Congress (FY 2002) includes the following items:

ITEM	AMOUNT
Price Escalation on Construction Features	\$ 900,000
Change in Assumed Cost Share	33,100,000
Total	\$34,000,000

Division: North Atlantic

District: Philadelphia

Cape May Inlet to Lower Township, NJ

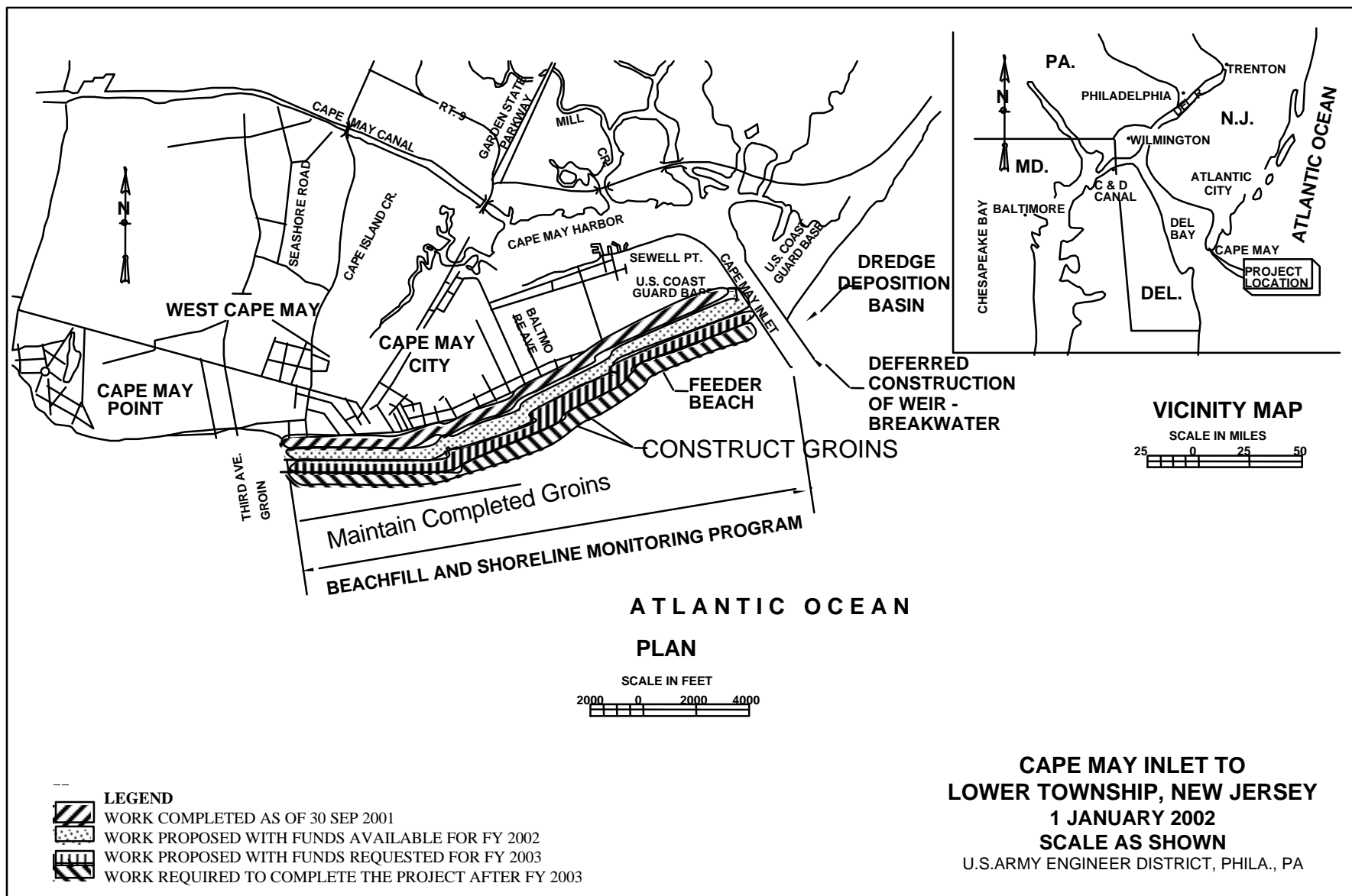
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 8 October 1976 and a Final Supplement was filed with the Environmental Protection Agency on 14 August 1981. Listing of Piping Plover (*Charadrius Melodus*) as an endangered bird species in January 1986 and the recent determination by State wildlife officials that the species nests in the project area have necessitated informal consultation in accordance with Section 7 of the Endangered Species Act of 1973. A letter from U.S. Fish and Wildlife Service, dated 20 August 1987 determined that the proposed project is not likely to adversely affect the Piping Plover, provided an operational window is observed. Coordination with the Service is continuing.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1978. Funds to initiate construction were appropriated in FY 1986. Section 111 of the River and Harbor Act of 1968 is applicable to this proposed project due to the shore damages caused in Cape May City by the Federal navigation project at Cape May Inlet.

Division: North Atlantic

District: Philadelphia

Cape May Inlet to Lower Township, NJ



APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Great Egg Harbor Inlet and Peck Beach, New Jersey (Continuing)

LOCATION: The project is located in Cape May and Atlantic Counties, New Jersey. Great Egg Harbor Inlet, an unimproved inlet, is about 1.1 miles wide at its narrowest point and provides a tidal connection between the Atlantic Ocean and Great Egg Harbor Bay, the New Jersey Intracoastal Waterway, and Great Egg Harbor River. Peck Beach is occupied in its entirety by the City of Ocean City and extends from Great Egg Harbor Inlet southward to Corson Inlet. The ocean frontage is about eight miles in length.

DESCRIPTION: The recommended plan consists of providing initial beachfill, with subsequent periodic nourishment, with a minimum berm width of 100 feet at an elevation of 8 feet above mean low water. The beachfill extends from Surf Road southwest to 34th Street with a 1000 foot taper south of 34th Street. This plan required the initial placement of roughly 6.2 million cubic yards of material and will require periodic nourishment of about 1.1 million cubic yards every three years. The material for the initial construction, and periodic nourishment will be taken from the ebb shoal area located about 5,000 feet offshore of the Great Egg Harbor Inlet. Additionally, the construction of the project required the extension of 38 storm drainpipes. All work is programmed.

AUTHORIZATION: Committee Resolutions on 15 December 1970 under the provision of Section 201 of the River and Harbor and Flood Control Act of 1965 and the Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because initial construction is complete.

TOTAL BENEFIT-COST RATIO: Not applicable because initial construction is complete.

INITIAL BENEFIT-COST RATIO: 2.0 to 1 at 8 5/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: The April 1989 General Design Memorandum approved on 2 May 1990 at September 1988 price levels.

Division: North Atlantic

District: Philadelphia

Great Egg Harbor Inlet and Peck Beach, NJ



SUMMARIZED FINANCIAL DATA :		STATUS:(1 Jan 2002)	PHYSICAL PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost	438,000,000	Initial Beachfill (Phase I)	100	Oct 1992
Initial Construction	20,556,000	Initial Beachfill (Phase II)	100	Mar 1993
Periodic Nourishment	417,444,000	Entire Project	19	Sept 2043
Estimated non-Federal Cost	236,000,000	PHYSICAL DATA:		
Initial Construction	19,889,000	Beachfill: Elevation +8 feet (NGVD); 100-Foot Width		
Cash Contributions	11,151,000	Periodic Nourishment: 1.1 million cy every three years		
Other Costs	8,738,000			
Periodic Nourishment	216,111,000			
Cash Contributions	216,111,000			
Other Costs	0			
Total Estimated Project Cost	674,000,000			
Initial Construction	40,445,000	ACCUMULATED		
Periodic Nourishment	633,555,000	PCT OF EST.		
		FED. COST		
Allocations to 30 September 2001	36,630,000			
Conference Allowance for FY 2002	250,000			
Allocation for FY 2002	250,000	1/		
Allocations through FY 2002	36,880,000	9		
Allocations Requested for FY 2003	460,000	9		
Programmed Balance to Complete after FY 2003	400,660,000			
Unprogrammed Balance to Complete after FY 2003	0			

1/ Reflects \$40,000 reduction assigned as savings and slippage and \$40,000 reprogrammed to the project.

JUSTIFICATION: The instability of Great Egg Harbor Inlet and the shoreline along Peck Beach is a significant problem. Peck Beach, a 9-mile-long barrier island along New Jersey's southern coastline contains the entire City of Ocean City. The primary problem at Ocean City is the vulnerability of the beach and the adjacent highly urbanized development to erosion and direct wave attack during major storms. Historical erosion rates for the beaches have averaged five feet per year with severe erosion rates up to 35 feet per year in some locations. In March 1962, a severe storm caused breaching and failing of bulkheads and dunes, and resulted in about \$15,000,000 damages of which \$4,000,000 was attributed to direct wave attack. It was noted that the area fronting the existing Federal shore protection for Ocean City sustained less damage than other locations. The storm of 28 to 30 March 1984 caused extensive damage to the beach, boardwalk, properties and buildings due to the vulnerable condition of the beaches. More recently, the storms of 30 and 31 October 1991 and 3 to 5 January 1992 caused extensive damages to the beach, boardwalk, properties and buildings. Since initial construction of the project was completed in March 1993, approximately \$20,000,000 worth of

Division: North Atlantic

District: Philadelphia

Great Egg Harbor Inlet and Peck Beach, NJ

JUSTIFICATION: (continued)

damages to the area were prevented during the 3-5 January 1992 storm, \$4,000,000 in damages to the boardwalk during Hurricane Felix in August 1995, and \$1,000,000 during the storm of 7-8 January 1996.

Beach erosion and loss of protective dunes have left Ocean City extremely vulnerable to inundations and direct wave attack from even minor storm events. The instability and shoaling of Great Egg Harbor Inlet also creates navigation difficulties for commercial and recreation craft, particularly those associated with low tides and ground swells and damages due to running aground. Unsafe navigation conditions due to excessive shoals at Great Egg Harbor Inlet required the State of New Jersey to commence emergency dredging operations in October 1989.

FISCAL YEAR 2003: The requested funding will be used to initiate the 4<sup>th</sup> cycle of periodic nourishment. The funds will be applied as follows:

Periodic Nourishment	128,000
Planning, Engineering, and Design	270,000
Construction Management	62,000
Total	\$ 460,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.	\$ 2,556,000	
Pay 35 percent of the all costs allocated to hurricane and storm damage reduction and all costs of operation and maintenance of shoreline protection structures and outfalls.	233,444,000	\$ 36,000
Total Non-Federal Costs	\$ 236,000,000	\$ 36,000

Division: North Atlantic

District: Philadelphia

Great Egg Harbor Inlet and Peck Beach, NJ

STATUS OF LOCAL COOPERATION: The state of New Jersey is the non-Federal sponsor for the project. In a letter dated 28 September 1990, the state identified a funding source for the non-Federal costs and indicated that it was prepared to proceed with the final negotiations to sign the Local Cooperation Agreement. The state's financing plan was provided by letter dated 28 February 1991. The local cooperation agreement was executed in September 1991.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$438,000,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$241,500,000) presented to Congress (FY 2002) includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 11,500,000
Change in Assumed Cost Share	185,000,000
Total	\$ 196,500,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 13 November 1970 and a Final Supplemental Environmental Impact Statement (FSEIS) was filed with the Environmental Protection Agency (EPA) in August 1990. The Piping Plover (*Charadrius melodus*) was listed as an endangered bird species in January 1986 and a determination that the species nests in the project area necessitated informal consultation in accordance with Section 7 of the Endangered Species Act of 1973. A letter from the US Fish and Wildlife Service, dated 9 January 1989 directed the Corps to minimize impacts to the Piping Plover in the project area. A detailed plan to protect the Piping Plover was included in the FSEIS. On 31 August 1990, the Advisory Council on Historic Preservation informed the District that it did not concur with the Finding of No Effect issued by the New Jersey State Historic Preservation Office on 12 April 1989. A process Memorandum of Agreement to address cultural resources concerns relating to project effects on the shipwreck *Sindia* was executed on 4 April 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1973. Funds to initiate construction were appropriated in FY 1990. Initial construction of the project was completed in March 1993.

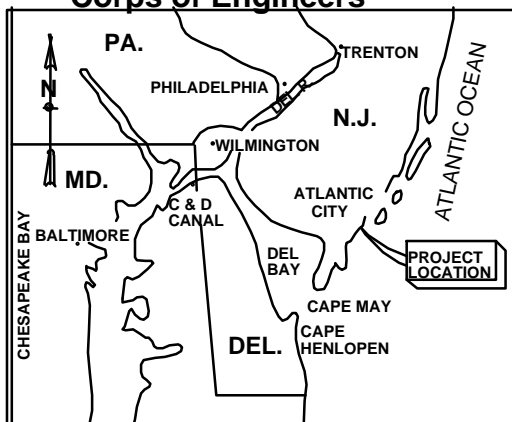
Division: North Atlantic

District: Philadelphia

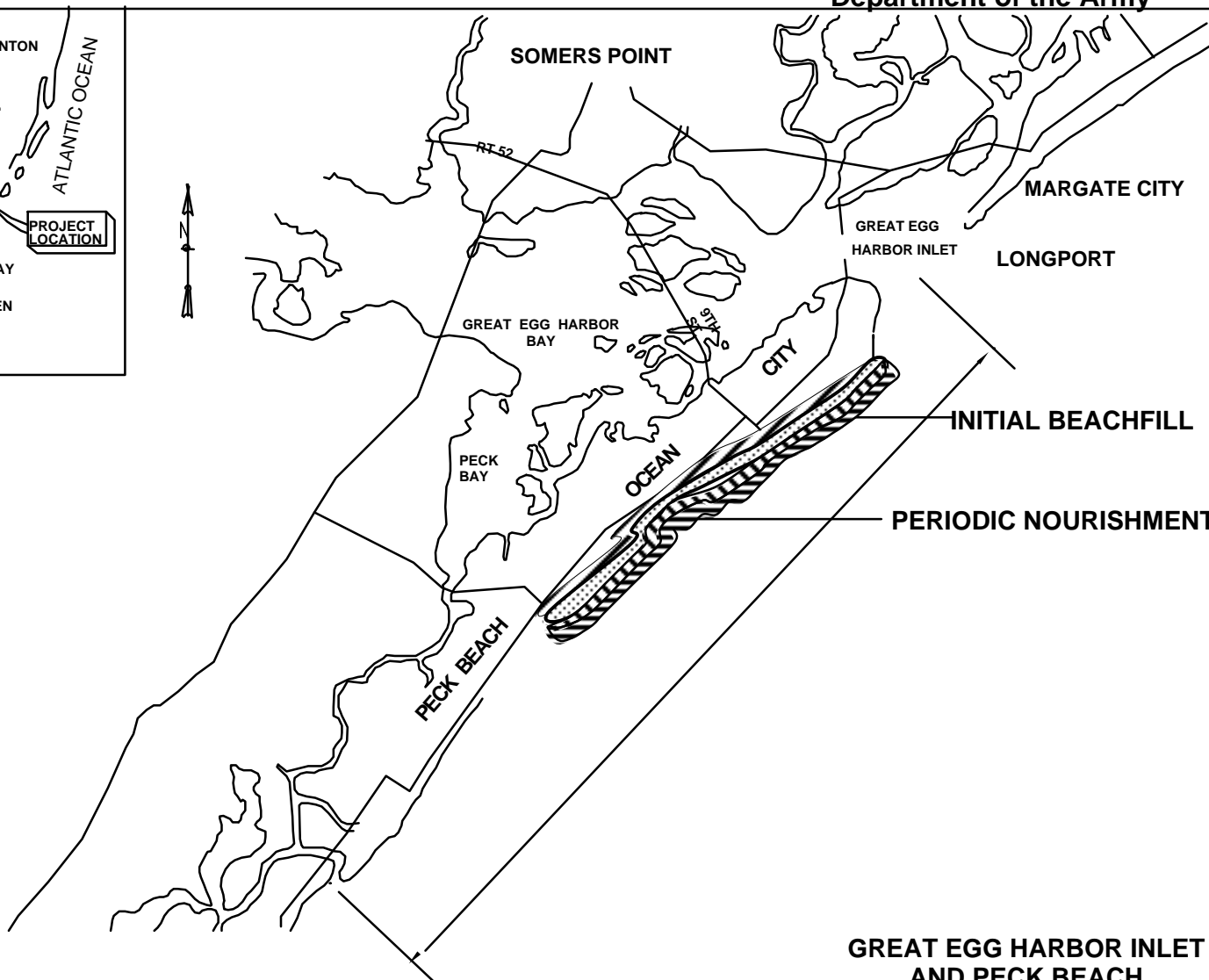
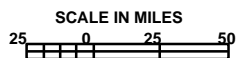
Great Egg Harbor Inlet and Peck Beach, NJ

Corps of Engineers

Department of the Army



**VICINITY MAP**

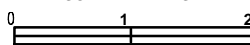


**LEGEND**

WORK COMPLETED AS OF 30 SEP 2001  
 WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2002  
 WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2003  
 WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2003

**PLAN**

SCALE IN MILES



**GREAT EGG HARBOR INLET  
 AND PECK BEACH  
 OCEAN CITY, NEW JERSEY**

**1 JANUARY 2002  
 SCALE AS SHOWN**

U.S. ARMY ENGINEER DISTRICT, PHILA.

APPROPRIATION TITLE: Construction, General - Navigation Mitigation, Ecosystem Restoration, Hurricane and Storm Damage Reduction

PROJECT: Lower Cape May Meadows, Cape May Point, NJ (Continuing)

LOCATION: Project area includes Lower Cape May Meadows and the Borough of Cape May Point and extends some 2 miles along the southern Atlantic coast of New Jersey.

DESCRIPTION: The plan consists of a dune/berm 20 feet wide extending for a total length of 10,050 feet; planting of 18 acres of dune vegetation; seaward restoration of 35 acres of emergent wetland; elimination of 95 acres of the nuisance plant *Phragmites australis*; planting of 105 acres of wetland vegetation; creation of drainage ditches; installation of two weir-flow control structures; creation of six fish reservoirs ; and construction of elements to create 25 acres of tidal marsh. The project also includes 650,00 cubic yards of periodic nourishment every 4 years over the 50-year project life, and monitoring and adaptive management over a 5-year period for the Lower Cape May Meadows freshwater wetlands restoration element.

AUTHORIZATION: Section 101 (a) (25) of WRDA 1999.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

INITIAL BENEFIT-COST RATIO: Not applicable

BASIS OF BENEFIT-COST RATIO: Benefits and costs (October 1998 price level) are based on the Chief of Engineers Report dated 05 April 1999.

Division: North Atlantic

District: Philadelphia

Lower Cape May Meadows, Cape May Point, NJ

ACCUM.  
PCT. OF EST.  
FED COST

SUMMARIZED FINANCIAL DATA:

Estimated Federal Cost	156,000,000
Estimated Non-Federal Cost	39,000,000
Cash Contribution	38,853,000
Other	\$ 147,000
Total Estimated Project Cost	195,000,000

STATUS:

(1 Jan 2002)

Fish & Wildlife
Initial Beachfill
Entire Project

PERCENT
COMPLETE
0
0
0

PHYSICAL
COMPLETION
SCHEDULE
Sept 2007
Sept 2005
Sept 2053

Allocations to 30 September 2001	723,000	
Conference Allowance for FY 2002	0	
Allocation for FY 2002	420,000	1/
Allocations through FY 2002	1,143,000	1
Allocation Requested for FY 2003	2,000,000	2
Programmed Balance to Complete after FY 2003	152,857,000	
Unprogrammed Balance to Complete after FY 2003	0	

PHYSICAL DATA:

Dune/berm: 20 feet wide; total length 10,050 ft  
Plantings: 158 acres of dune, emergent wetland and wetland.  
Creation of Weir-flow Control Structures and fish reservoirs  
New tidal marsh: 25 acres  
Monitoring and adaptive management: 5 years  
Periodic Nourishment: 4 year cycle for 50 years with monitoring

1/ Reflects reduction of \$80,000 assigned as savings and slippages.

JUSTIFICATION: Lower Cape May Meadows has been severely impacted by shoreline erosion linked to the Federal navigation project at Cape May Inlet completed in 1911. Erosion has resulted in the direct loss of beach and unique freshwater wetland habitat. Erosion to the dune system has left the remaining freshwater ecosystem in The Meadows substantially degraded through saltwater intrusion and subsequent topographical alteration by allowing oceanwater overtopping during storm events. Since 1991, the dunes protecting the wetlands have been breached six times, resulting in saltwater intrusion to the freshwater wetlands. Very few plant or animal species have the adaptations needed to survive such large fluctuations or range of salinities (freshwater to saltwater). The saltwater intrusion has also encouraged the subsequent proliferation of the nuisance plant species *Phragmites australis*, also known as common reed. These conditions have significantly reduced the ability of the wetlands to support the wildlife and endangered plant species which reside there. It is estimated that an additional 147 acres of habitat will be by the year 2050 if shoreline erosion is to continue unabated.

Compounding the problem is the hydraulic/hydrologic relationship between Lower Cape May Meadows and the communities of Cape May Point and West Cape May. Lower Cape May Meadows serves as a buffer during storms between the ocean and the surrounding developed areas. When the Meadows area is inundated during storm events, the flood waters flow into Cape May Point and the developed portions of Lower Township and West Cape May, flooding the low lying areas of these towns.

Division: North Atlantic

District: Philadelphia

Lower Cape May Meadows, Cape May Point, NJ

FISCAL YEAR 2003: The requested amount will be applied as follows:

Initiate construction	\$1,151,000
Planning, Engineering and Design	729,000
Construction Management	120,000
Total	\$2,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

Payments during	Annual Operation,
Construction and	Maintenance, and
Reimbursement	Replacement Costs

Provide 35 percent of the initial construction costs assigned to the non-mitigation portion of the project for hurricane and storm damage reduction and, for the impacts attributable to Federal navigation works, share in the costs in the same proportion as the cost sharing provisions applicable to the project causing the erosion impacts (76 percent of project costs assigned to mitigation of jetty impacts).

\$ 38,831,000

Provide all lands, easements, rights-of-way, and relocations.

\$ 169,000

Total Non-Federal Cost \$ 39,000,000

STATUS OF LOCAL COOPERATION: The NJDEP is the non-Federal sponsor. The Project Cooperation Agreement (PCA) is scheduled to be executed in December 2002.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$156,000,000 is the initial cost estimate being presented to Congress and reflects the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects.

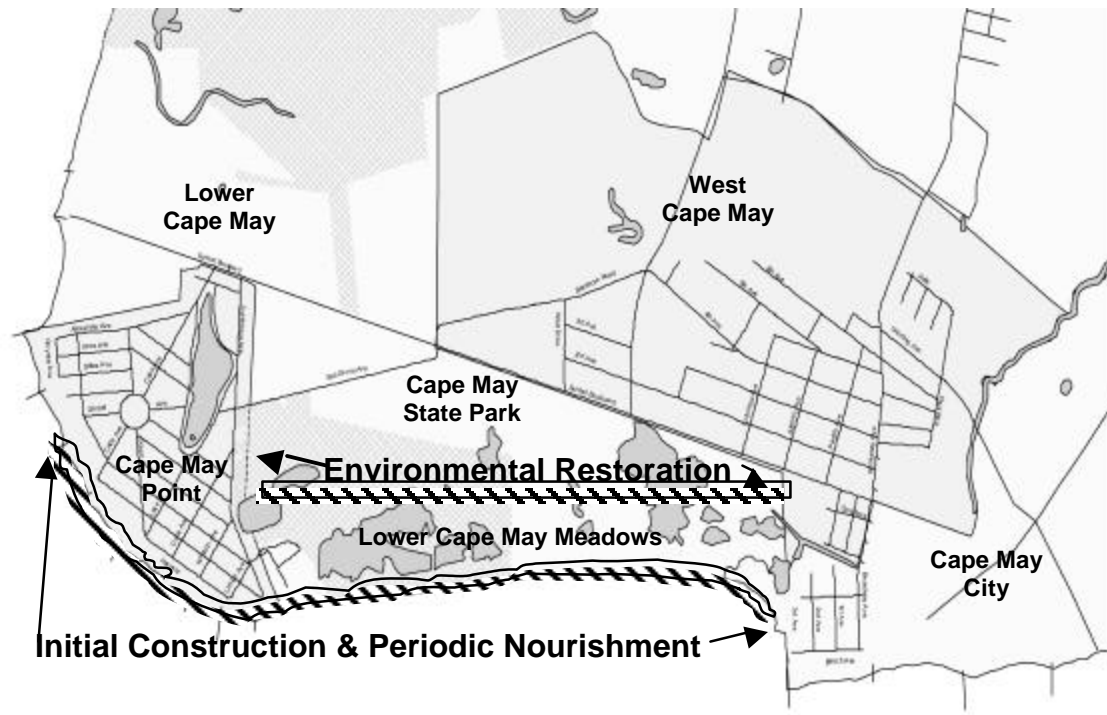
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Assessment was completed in November 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1999. Funds to initiate construction were appropriated in FY 2002.

Division: North Atlantic

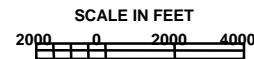
District: Philadelphia

Lower Cape May Meadows, Cape May Point, NJ

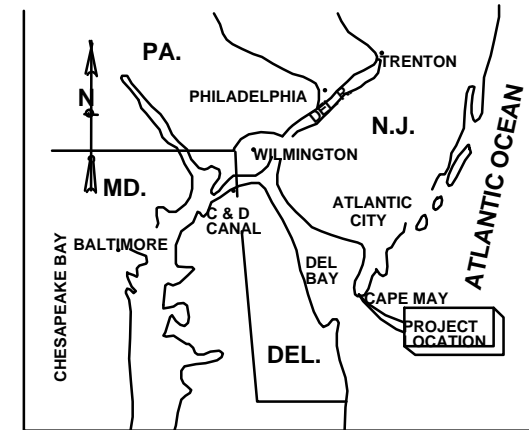


ATLANTIC OCEAN

PLAN

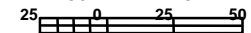


- LEGEND**
- WORK COMPLETED AS OF 30 SEP 2001
  - WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2002
  - WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2003
  - WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2003



VICINITY MAP

SCALE IN MILES



**LOWER CAPE MAY MEADOWS TO  
CAPE MAY POINT, NEW JERSEY  
1 JANUARY 2002  
SCALE AS SHOWN  
U.S.ARMY ENGINEER DISTRICT, PHILA., PA**



APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Raritan Bay and Sandy Hook Bay, New Jersey (Continuing)

LOCATION: The overall project area encompasses 2.7 miles of shoreline in the Borough of Keansburg and in East Keansburg (located in Middletown Township), Monmouth County, and 0.6 miles of shoreline in Laurence Harbor (located in Old Bridge Township), Middlesex County, New Jersey. The project area lies along the Raritan Bay and Sandy Hook Bays shoreline between Sandy Hook and the mouth of the Raritan River.

DESCRIPTION: In 1973, the U.S. Army Corps of Engineers completed a project that consisted of groins, a beach berm, levees, pump station, floodwall, and a storm closure gate across Way Cake Creek in the Keansburg area. Similarly, the Corps constructed a beach berm and levees at Old Bridge in 1966. The renourishment project consists of the restoration of the previously constructed beach berm and renourishment on a periodic basis to reduce wave induced erosion and provide storm damage protection to commercial, public, and private properties and infrastructure.

AUTHORIZATION: Flood Control Act of October 12, 1962, Section 506 of WRDA 1996 authorized periodic nourishment for 50 years from initiation of construction, subject to a review of the project, in accordance with WRDA 1976 and Section 934 of WRDA 1986, as amended.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because initial construction has been completed.

TOTAL BENEFIT-COST RATIO: Not applicable because initial construction has been completed.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 7 5/8 percent (FY 1998).

BASIS OF BENEFIT-COST RATIO: Initial benefits are from the analysis contained in the General Design Memorandum revised January 1965, at May 1964 price levels. Updated benefits are from the draft Section 934 reevaluation report dated March 2001, at October 2000 price levels.

Division: North Atlantic

District: New York

Raritan Bay and Sandy Hook Bay, NJ

SUMMARIZED FINANCIAL DATA:		ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$ 36,400,000	Initial Construction	100	Jan 1973
Initial Construction	10,900,000		Periodic Nourishment	0	Sep 2018
Periodic Nourishment	25,500,000				
Estimated Non-Federal Cost		19,7000,000	PHYSICAL DATA:		
Initial Construction	2,000,000		Initial construction:		
Periodic Nourishment	17,300,000		Beachfill - 3.4 million cubic yards		
Other Costs	400,000		Levees, closure gate, pump station, groins		
Total Estimated Project Cost		56,100,000	Periodic nourishment: 5 year cycles		
Initial Construction	12,900,000		Keansburg/East Keansburg - 1.2 million cy		
Periodic Nourishment	42,800,000		first renourishment operation, and 431,000		
Other Costs	400,000		cy for three subsequent cycles		
			Old Bridge - 276,000 cy first renourishment		
			operation, and 81,000 cy for two subsequent		
			cycles		
Allocation to 30 September 2001	8,222,000				
Conference Allowance for FY 2002	400,000				
Allocation for FY 2002	336,000 <u>1/</u>				
Allocations through FY 2002	8,558,000	23			
Allocation Requested for FY 2003	1,000,000	26			
Programmed Balance to Complete					
after FY 2003	26,842,000				
Unprogrammed Balance to Complete	0				
after FY 2003					

1/ Reflects \$64,000 reduction assigned as savings and slippage.

JUSTIFICATION: Coastal storms have been a continuing source of damage and economic loss along the south shore of Raritan Bay. As a result of recent hurricanes, coastal storm events, and the lack of subsequent storm protection measures in these areas, the shore protection and flood control protection afforded by the Keansburg, East Keansburg, and Old Bridge beaches have been significantly reduced. Erosion has seriously reduced the width and height of the shorelines in the project area with consequent exposure of the shore and inland areas to tidal inundation and wave attack damages. Failure of the dune system at Keansburg, East Keansburg and Old Bridge would render the project levee features useless. A recurrence of the December 1992 northeaster would cause serious flood damages to residential and commercial and public structures in the Keansburg/ East Keansburg area and to structures and significant infrastructure in Old Bridge.

Division: North Atlantic

District: New York

Raritan Bay and Sandy Hook Bay, NJ

JUSTIFICATION: (continued)

Based on the reevaluation conducted under Section 934 of WRDA of 1986, the average annual benefits are as follows:

Storm Damage Reduction	\$ 4,944,000
Recreation	200,000
Total	\$ 5,144,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

Initiate Nourishment Contract	\$ 942,000
Construction Management	\$ 58,000
Total	\$ 1,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the Requirements listed below:

Payments During Construction and Reimbursement	Annual Operation, Maintenance and Replacement Costs
--	---

REQUIREMENTS OF LOCAL COOPERATION:

Pay 48 percent of initial construction costs in Old Bridge and 30 percent of initial construction costs in Keansburg and East Keansburg.	\$ 2,000,000	\$73,000
--	--------------	----------

Pay 65 percent of the periodic nourishment costs for FY02 and beyond allocated to storm damage reduction, and 50 percent of the costs allocated to recreation, bear all costs of operation, maintenance, and replacement of storm reduction facilities	17,300,000	27,000
---	------------	--------

Provide lands, easements, and rights of way	\$ 400,000	
---	------------	--

Total Non-Federal Costs	\$ 19,700,000	\$0
-------------------------	---------------	-----

STATUS OF LOCAL COOPERATION: The non-Federal sponsor for this project is the New Jersey Department of Environmental Protection. The Project Cooperation Agreement is scheduled to be executed by May 2003. The New Jersey Department of Environmental Protection was also the sponsor for the initial project completed in 1973.

Division: North Atlantic

District: New York

Raritan Bay and Sandy Hook Bay, NJ

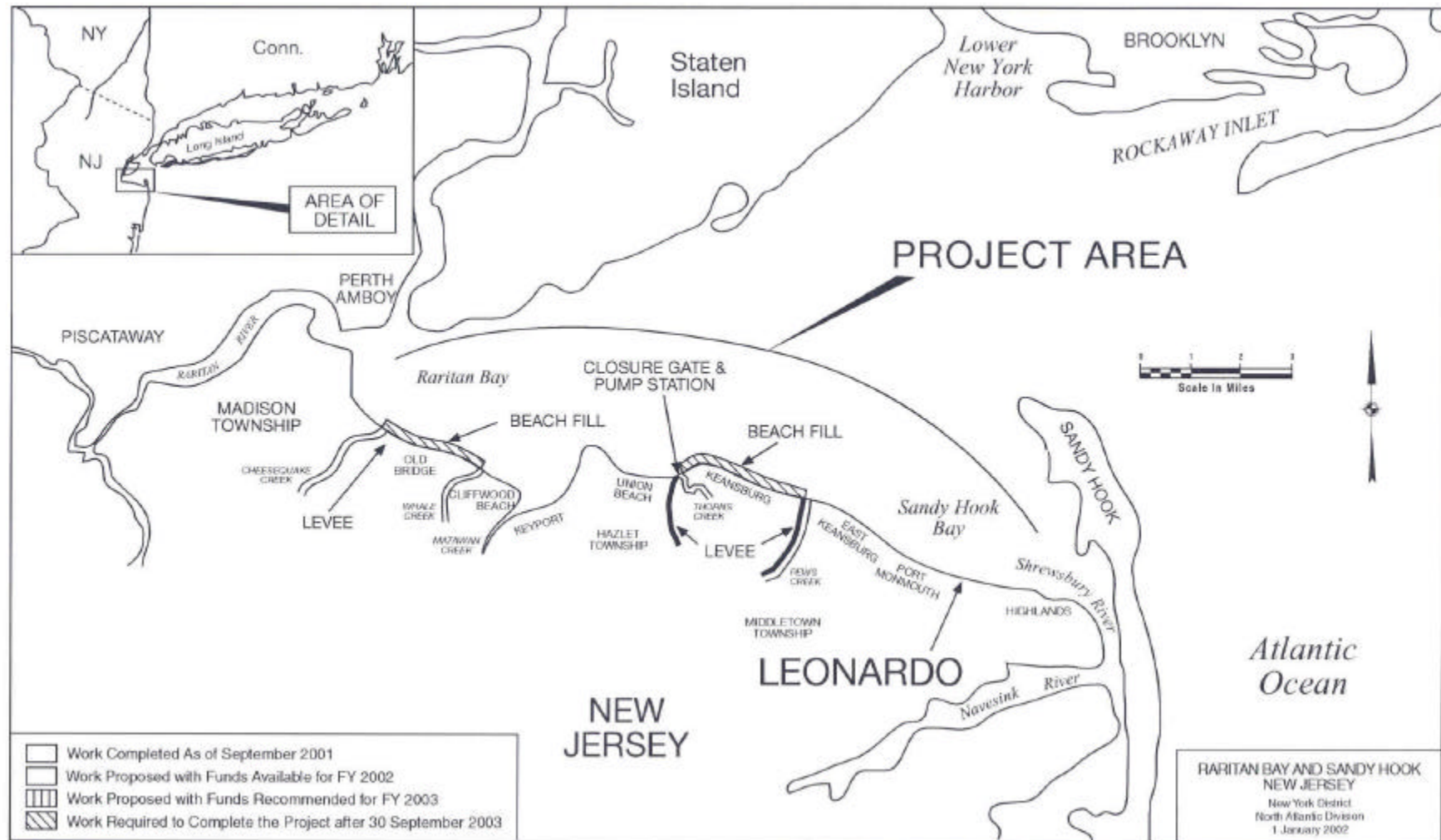
COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$36,400,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$23,500,000) presented to Congress (FY 2002) includes the following items:

Price Escalation on Construction Features	\$ 1,000,000
Change in Assumed Cost Share	11,900,000
Total	\$12,900,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final General Design Memorandum revised January 1965 predated the requirements of the National Environmental Policy Act. An Environmental Assessment for the extension of beach nourishment has been prepared and will be released for public review in May 2001.

OTHER INFORMATION: Funds for initiation of construction of the renourishment phase were appropriated in FY 1998.

The existing Federal project for the Raritan Bay and Sandy Hook Bay was authorized by the Flood Control Act of October 12, 1962, as a dual purpose Beach Erosion Control and Hurricane Protection Project. Funds for construction of the original project were appropriated in FY 1965. A project was completed in the area in 1973. The original project did not include provisions for periodic nourishment. Section 506 of the Water Resources Development Act of 1996 authorizes periodic nourishment for 50 years from initiation of construction, subject to a review of the project, in accordance with WRDA 1976 and Section 934 of WRDA 1986, as amended.



APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Sandy Hook to Barnegat Inlet, New Jersey (Continuing)

LOCATION: The overall project area lies along the Atlantic Ocean shoreline of New Jersey in Monmouth and Ocean Counties between Sandy Hook to the North and Barnegat Inlet to the South. Section I - The Sea Bright to Ocean Township section lies solely within Monmouth County. The Sea Bright to Ocean Township section is the northernmost 12 miles of the project, which includes the following communities: Sea Bright, Long Branch, Deal, Allenhurst, and Ocean Township. Section II - Asbury Park to Manasquan section comprises the southern portion of Monmouth County and is approximately 9 miles long. It includes the following communities: Asbury Park, Ocean Grove, Bradley Beach, Avon-by-the Sea, Belmar, Spring Lake, Sea Girt, State Encampment, and Manasquan.

DESCRIPTION: The recommended plan for Section I, Sea Bright to Ocean Township, includes construction of a 100-foot-wide-berm at an elevation of 10 feet above mean low water with an additional 2-foot-high-storm-berm cap along the entire 12 miles of project shoreline extending from Sea Bright to Ocean Township. The recommended plan for Section II, Asbury Park to Manasquan, includes construction of a berm 100 feet wide at an elevation of 8.4 feet above mean low water. All work on Sections I and II is programmed. Section III, Point Pleasant to Seaside Park, was deauthorized.

AUTHORIZATION: The River and Harbor Act of 3 July 1958 for Sections I and II, the Water Resources Development Act of 1986, and the Water Resources Development Act of 1988.

REMAINING BENEFITS-REMAINING COST RATIO: 1.4 to 1 at 8 1/8 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 8 1/8 percent.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 8 1/8 percent (FY 1985).

BASIS OF BENEFITS-COST RATIO: Benefits are from the analysis contained in the General Design Memorandum revised March 1990 at June 1988 price levels. For Section II, Asbury Park to Manasquan Inlet, benefits are from the General Design Memorandum, dated May 1994, at June 1992 price levels.

Division: North Atlantic

District: New York

Sandy Hook to Barnegat Inlet, NJ

SUMMARIZED FINANCIAL DATA:			ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		\$ 933,800,000		Sea Bright to	14	Sep 2044
Initial Construction	137,300,000			Ocean Township		
Periodic Nourishment	796,500,000			Asbury Park to	10	Sep 2049
				Manasquan		
Estimated Non-Federal Cost		502,900,000		Entire Project	13	Sep 2049
Initial Construction	120,600,000			Initial Construction	76	Sep 2003
Cash Contributions	73,900,000			Periodic Nourishment	0	Sep 2049
Other Costs	46,700,000					
Periodic Nourishment	382,300,000					
Cash Contributions	382,300,000					
Other Costs	0					
Total Estimated Project Cost		\$ 1,436,700,000				
Initial Construction	257,900,000					
Periodic Nourishment	1,178,800,000					
Allocations to 30 September 2001	117,495,000					
Conference Allowance for FY 2002	5,000,000					
Allocation for FY 2002	4,201,000	1/				
Allocations through FY 2002	121,696,000		13			
Allocation Requested for FY 2003	4,434,000		13			
Programmed Balance to Complete after FY 2003	807,670,000					
Unprogrammed Balance to Complete after FY 2003	0					

PHYSICAL DATA

Sea Bright to Ocean Township; Beach Placement over 12 miles; notching existing groins.

Asbury Park to Manasquan: Beach Placement over 9 miles, notching existing groins.

1/ Reflects \$799,000 reduction assigned as savings and slippage.

Division: North Atlantic

District: New York

Sandy Hook to Barnegat Inlet, NJ

JUSTIFICATION: Erosion has seriously reduced the width of most beaches in the study area with consequent exposure of shore to storm damage. Because of this erosion of the shore, the area does not provide sufficient recreational beaches for the proper accommodation of the present and prospective tributary population. The State of New Jersey and mayors of affected communities are very concerned over the increased potential for damages to structures due to the eroded condition of the existing beaches. The March 1962 storm caused \$40,400,000 in damages (October 1993 price levels) along the twenty five mile stretch of shore from Sandy Hook to Manasquan Inlet. Subsequent emergency restoration works in this reach cost \$7,383,000 (October 1988 price levels). In Section I, the restored beach has eroded while the area behind the seawall is more densely developed. Section II suffers from eroding beaches also. The storms of 30 and 31 October 1991, and 3 to 5 January 1992, caused \$6,500,000 in damages to shore structures and the small beach seaward of the recently rebuilt state seawall within the project area. The rebuilt seawall was overtopped by the significant ocean waves, and its seaward toe is severely threatened by undercutting and collapse because of the lack of beach. The average annual benefits from erosion control measures are \$53,151,000. For Section II, the average annual benefits from erosion control measures are \$11,878,000.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Section I, Seabright-Ocean Township

Planning, Engineering and Design	200,000
----------------------------------	---------

Section II, Asbury Park to Manasquan

Initiate Nourishment Contract I	\$ 3,755,000
---------------------------------	--------------

Post-Construction Monitoring	64,000
------------------------------	--------

Construction Management	415,000
-------------------------	---------

Total	\$ 4,434,000
-------	--------------

Division: North Atlantic

District: New York

Sandy Hook to Barnegat Inlet, NJ



NON-FEDERAL COSTS: Consistent with the Water Resources Development Act of 1988, the non-Federal share of the first \$40,000,000 of construction of the Sea Bright to Ocean Township reach consists of monies expended by non-Federal interests for reconstruction of the seawall at Sea Bright and Monmouth Beach, New Jersey. Cost sharing of the project, in excess of the first \$40,000,000 increment, is in accordance with Title I of the Water Resources Development Act of 1986. Section I requirements also include lands, easements, rights-of-way and relocations. In Section II, the non-Federal share includes a cash contributions plus lands, easements, rights-of-way, and relocations. The combined Section I and Section II requirements follow:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance and Replacement Costs
Requirements of Local Cooperation		
Provide all lands, easements, and rights-of-way, and relocations for Sections I and II.	\$34,500,000	\$ 5,180,000
Of the first \$40,000,000 in costs for initial construction of Section I, non-Federal interests are required to pay for reconstruction of the seawall at Sea Bright and Monmouth Beach, New Jersey. Thereafter, the non-Federal share is to be 35 percent of the initial project costs in excess of \$40,000,000, excluding non-creditable lands, easements, and rights-of way, and bear all costs of operation and maintenance and replacement of storm damage reduction facilities.	50,695,000	11,960,000
Pay 35 percent of the first costs of Section II, excluding non-creditable lands, easements, and rights-of-way, and bear all cost of operation and maintenance and replacement of storm damage reduction facilities.	23,205,000	5,410,000
Pay 35 percent of the cost of periodic nourishment for Sections I and II for FY02 and beyond	382,300,000	
Reconstruct Seawall at Sea Bright and Monmouth Beach (Project requirement).	12,200,000	1,100,000
Total Non-Federal Costs	\$ 502,900,000	\$23,650,000

STATUS OF LOCAL COOPERATION: The Local Cooperation Agreement for Section I was signed on 30 July 1992 with the State of New Jersey Department of Environmental Protection (NJDEP). For Section II, the Project Cooperation Agreement was executed in August 1996. The previously executed PCA will be modified to incorporate the non-Federal share of 65 percent of the cost of periodic nourishment for FY02 and beyond before initiating the proposed FY02 construction effort.

Division: North Atlantic

District: New York

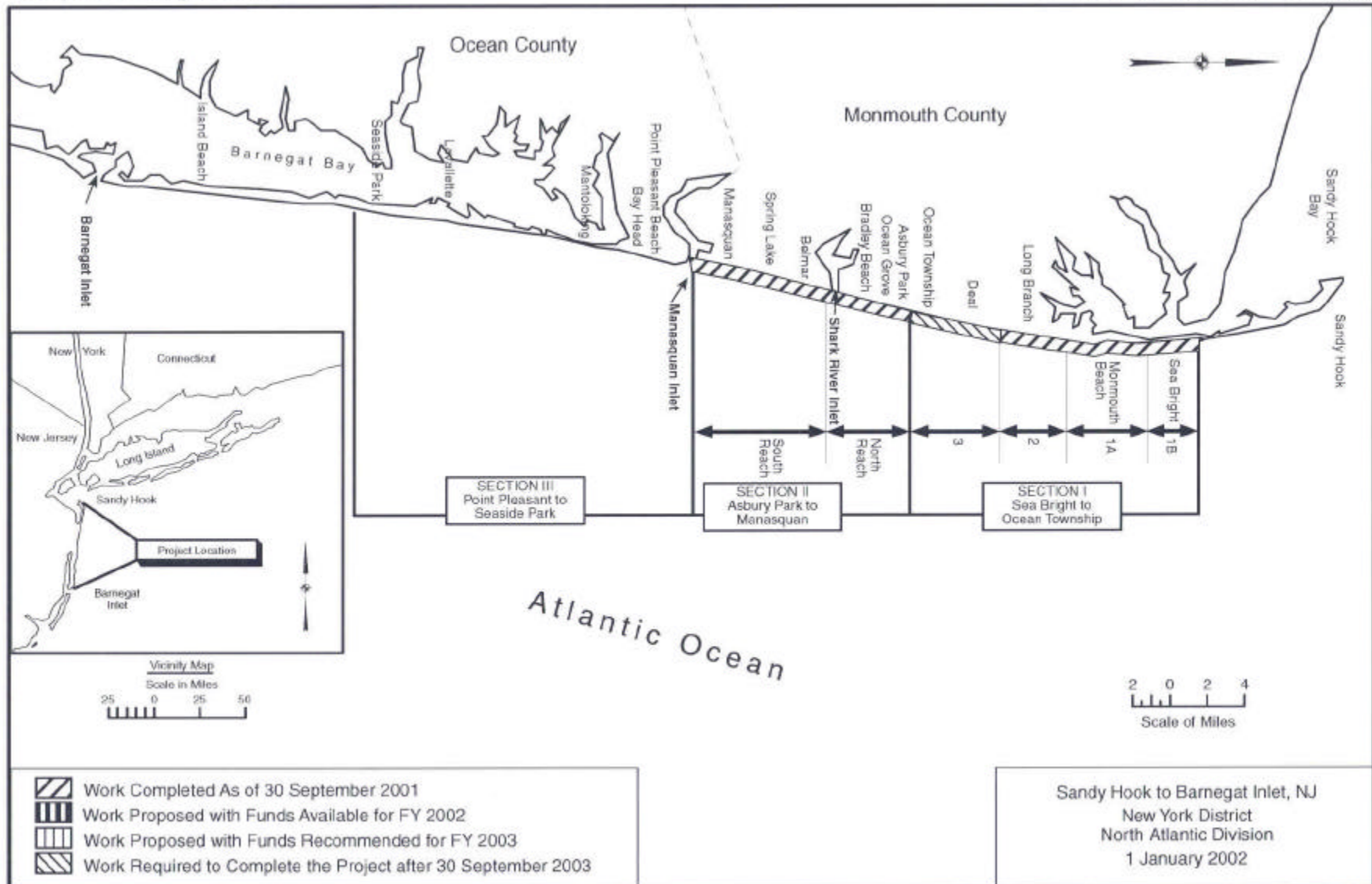
Sandy Hook to Barnegat Inlet, NJ

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$933,800,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$698,200,000) presented to Congress (FY 2002) includes the following items:

Item	Amount
Price escalation on Construction Features	- \$121,300,000
Change in Assumed Cost Share	356,900,000
Total	\$235,600,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Environmental Impact Statement (EIS) for Section I (Seabright to Ocean Township) was filed with the Environmental Protection Agency (EPA) in June 1990. A Record of Decision was signed on 26 November 1990. The EIS for Section II was filed with the EPA in August 1993. A Record of Decision was signed in April 1996.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1985. Project benefits, costs, and financial data reflect Section I and Section II only.



APPROPRIATION TITLE: Construction, General - Shoreline Protection

PROJECT: Townsends Inlet to Cape May Inlet, New Jersey (Continuing)

LOCATION: The site of the recommended project is located on the Atlantic Coast of New Jersey, approximately 23 miles southwest of Atlantic City. It includes the communities of Avalon, Stone Harbor, and North Wildwood.

DESCRIPTION: The recommended project consists of five reaches for shoreline protection for Avalon, Stone Harbor and North Wildwood, NJ, and an environmental restoration project for Stone Harbor Point. The shoreline protection portion of the project includes: (1) the construction of stone seawalls for the first and second reaches at the inlet frontages at Avalon and North Wildwood with seawalls at top elevations of 14 feet and 13 feet above mean low water respectively, extending for approximately 2,970 linear feet in Avalon and 8,660 linear feet in North Wildwood and would encompass the existing non-Federal bulkheads, rock revetments, and seawalls; and (2) the placement of 4.6 million cubic yards of initial beachfill with 800,000 cubic yards of periodic nourishment every three years for the third and fourth reaches for the oceanfronts of Avalon and Stone Harbor (Seven Mile Island). The beach fill segments will provide berm widths of 150 feet at elevation 8.5 feet above mean low water and dunes 7.5 feet above grade at elevation 16 feet above mean low water. The dunes would have a total length of 22,500 feet, a crest width of 25 feet, and would include dune grass plantings and sand fencing. The ecosystem restoration portion of the project includes an oceanfront berm 150 feet wide with a crest width of 25 feet at elevation 8.5 feet above mean low water for the fifth reach at Stone Harbor Point. This berm would extend 1,000 linear feet southwest of the terminal groin in Stone Harbor. The plan also includes the planting of approximately 3 acres of dune grass and 64 acres of bayberry and eastern red cedar. No periodic nourishment would be included with this project feature.

AUTHORIZATION: Water Resource Development Act 1999, Section 101(a)(26).

REMAINING BENEFIT-REMAINING COST RATIO: 1.8 to 1 at 6 7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 6 7/8 percent

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 6 7/8 percent (FY 2001)

BASIS OF BENEFIT-COST RATIO: Townsends Inlet to Cape May Inlet feasibility study. Chief's Report dated 28 September 1998

Division: North Atlantic

District: Philadelphia

Project: Townsends Inlet to Cape May Inlet, NJ

## SUMMARIZED FINANCIAL DATA

STATUS:  
(1 Jan 2002)PERCENT  
COMPLETECOMPLETION  
SCHEDULE

Estimated Federal Cost		\$ 290,000,000
Initial Construction	48,300,000	
Periodic Nourishment	241,700,000	
Estimated non-Federal Cost		\$ 156,000,000
Initial Construction	156,000,000	
Cash Contributions	25,896,600	
Other Costs	103,400	
Periodic Nourishment	130,000,000	
Cash Contributions	130,000,000	
Other Costs	0	
Total Estimated Project Cost		\$ 446,000,000
Initial Construction	74,300,000	
Periodic Nourishment	371,700,000	

Initial Beachfill	0	Sept 2005
Periodic Nourishment	0	Sept 2051
Seawalls	0	Sept 2008
Ecosystem Restoration	0	Sept 2012
Entire Project	0	Sept 2051

PHYSICAL DATA: Stone Harbor Point: 4.3 miles of beachfill, berm width of 150-foot and dune height of +16-feet. Avalon and Stone Harbor: 2.2 miles of seawall construction. Stone Harbor Point: Ecosystem restoration of approximately 107 acres of natural barrier island with beach-fill and dune construction with periodic nourishment and planting of 67 acres of bayberry and red cedar roosting habitat.

Allocations to 30 September 2001	1,702,000	ACCUMULATED
Conference Allowance for FY 2002	2,000,000	PCT OF EST.
Allocation for FY 2002	1,680,000 <u>1/</u>	FED. COST
Allocations through FY 2002	3,382,000	1
Allocations Requested for FY 2003	7,000,000	4
Programmed Balance to Complete after FY 2003	279,618,000	
Unprogrammed Balance to Complete after FY 2003	0	

1/ Reflects \$320,000 reduction assigned as savings and slippages.

JUSTIFICATION: The area has been subjected to major flooding, erosion and wave attack during storms, causing damage to structures, and, since 1992, was declared a National Disaster Area by the President of the United States on three separate occasions. In recent years, continued erosion has resulted in a reduction of the height and width of the beachfront, which has increased the potential for storm damage. In addition, valuable fish and wildlife habitat along the southern end of Stone Harbor has been lost to erosion.

Division: North Atlantic

District: Philadelphia

Project: Townsends Inlet to Cape May Inlet, NJ

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue construction	\$6,700,000
Planning, Engineering and Design	100,000
Construction Management	200,000
Total	\$7,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights of way	\$ 103,400	
Pay 35 percent of the all costs allocated to hurricane and storm damage reduction and ecosystem restoration	25,896,600	
Pay 35 percent of the cost of periodic nourishment	130,000,000	
Total Non-Federal Costs	\$ 156,000,000	

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of New Jersey Department of the Environmental Protection (NJDEP). The Project Cooperation Agreement is scheduled to be executed in March 2002.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$290,000,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$163,000,000) presented to Congress (FY 2002) includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 15,000,000
Change in Assumed Cost Share	112,000,000
Total	\$127,000,000

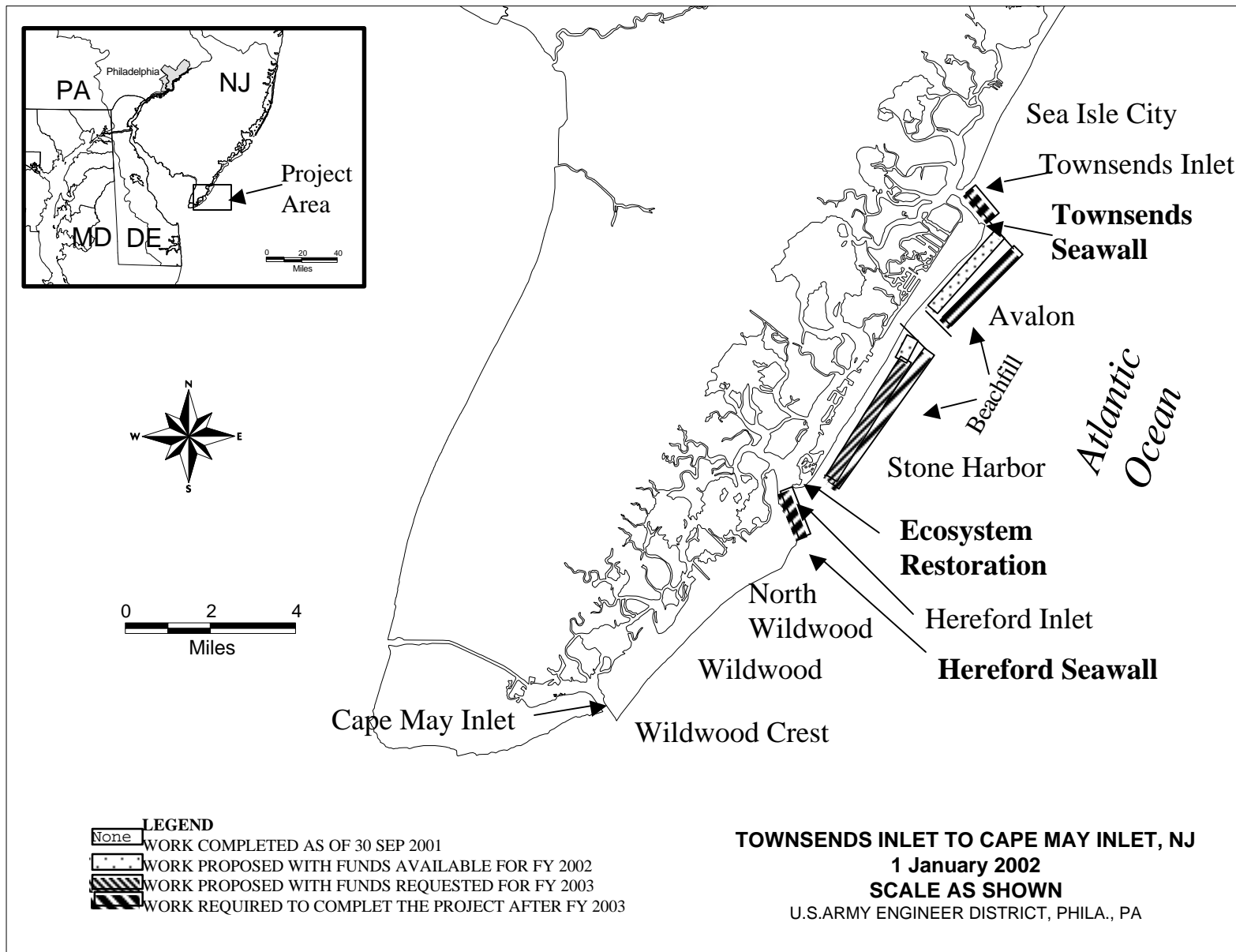
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was completed in March 1997.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2001.

Division: North Atlantic

District: Philadelphia

Project: Townsends Inlet to Cape May Inlet, NJ



APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Atlantic Coast of New York City, Rockaway Inlet to Norton Point, Coney Island, New York (Continuing)

LOCATION: The project is located on the South shore of Long Island in Brooklyn (Kings County), New York, approximately nine miles south of the Battery, New York City.

DESCRIPTION: Programmed work consists of construction of a 100-foot-wide berm at an elevation of 13 feet above mean low water, a groin at the western end of the restored beach, and a fillet of beachfill extending westward from the groin at West 37th Street. Unprogrammed work includes construction of comfort and lifeguard stations, construction of a groin at east end of project and extending beach seaward of historic shoreline.

AUTHORIZATION: Water Resources Development Act of 1986 as modified by the Intermodal Surface Transportation and Efficiency Act of 1991.

REMAINING BENEFIT-REMAINING COST RATIO: 2.7 to 1 at 8 7/8 percent.

TOTAL BENEFIT-COST RATIO: 2.7 to 1 at 8 7/8 percent.

INITIAL BENEFIT-COST RATIO: 2.8 to 1 at 8 7/8 percent (FY 1992).

BASIS OF BENEFIT-COST RATIO: Final General Design Memorandum entitled Atlantic Coast of New York City, Rockaway Inlet to Norton Point (Coney Island Area), New York, dated April 1992, at October 1990 price levels.

STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Programmed Work		
Initial Construction	99	Sep 2004
Periodic Nourishment	0	Sep 2045
Entire Project	20	Sep 2045
Unprogrammed Work		
Comfort and Lifeguard Stations	0	Indefinite
Groin and additional Beach Berm	0	Indefinite

1/ For programmed work only; remaining work is indefinite pending a decision to construct these features.

Division: North Atlantic

District: New York

Atlantic Coast of New York City, Rockaway Inlet to  
Norton Point, Coney Island, NY



SUMMARIZED FINANCIAL DATA:

ACCUM.  
PCT. OF EST.  
FED COST

Estimated Federal Cost			103,800,000
Programmed Construction		71,100,000	
Initial Construction	15,700,000		
Periodic Nourishment	52,900,000		
Comfort and Lifeguard Stations	2,500,000		
Unprogrammed Construction		32,700,000	
Initial Construction	15,400,000		
Periodic Nourishment	0		
Comfort and Lifeguard Stations	17,300,000		
Estimated Non-Federal Cost			55,900,000
Programmed Construction		40,500,000	
Initial Construction	8,400,000		
Cash Contribution	8,400,000		
Other Costs	0		
Periodic Nourishment	32,100,000		
Cash Contributions	32,100,000		
Other Costs	0		
Unprogrammed Construction		15,400,000	
Initial Construction	15,400,000		
Cash Contribution	15,400,000		
Other Costs	0		
Periodic Nourishment	0	0	
Cash Contributions	0		
Other Costs	0		
Comfort and Lifeguard Stations	0		

PHYSICAL DATA

Berm 100 feet wide at 13 feet NGVD  
Extended berm 165 feet wide at  
8 feet NGVD.  
Groins at the eastern and western  
ends of the restored beach.

Fillet of beachfill extending  
westward from groin at West 37th St.  
Relocation and/or reconstruction  
of existing comfort and lifeguard  
stations.

Division: North Atlantic

District: New York

Atlantic Coast of New York City, Rockaway Inlet to  
Norton Point, Coney Island, NY

SUMMARIZED FINANCIAL DATA: (Continued)

ACCUM.  
PCT. OF EST.  
FED COST

Total Estimated Programmed Construction Cost	111,600,000		
Initial Construction	24,100,000		
Periodic Nourishment	85,000,000		
Comfort and Lifeguard Stations	2,500,000		
 Total Estimated Unprogrammed Construction Cost	 48,100,000		
Initial Construction	30,800,000		
Periodic Nourishment	0		
Comfort and Lifeguard Stations	17,300,000		
 Total Estimated Project Cost	 159,700,000		
Initial Construction	54,900,000		
Periodic Nourishment	85,000,000		
Comfort and Lifeguard Stations	19,800,000		
 Allocation to 30 September 2001	 15,761,000		
Conference allowance for FY 2002	900,000		
Allocation for FY 2002	756,000	<u>1/</u>	
Allocations through FY 2002	16,571,000		16
Allocation Requested for FY 2003	450,000		16
Programmed Balance to Complete after FY 2003	54,079,000		
Unprogrammed Balance to Complete after FY 2003	32,700,000		

1/ Reflects \$144,000 reduction assigned as savings and slippage.

JUSTIFICATION: Erosion had caused serious damage to the shoreline extending through the communities of Coney Island, Brighton Beach, and Sea Gate, New York. Due to this erosion, residential and commercial developments had become increasingly susceptible to storm damage from wave attack and inundation. In March 1962, a severe northeast storm caused breaching and failure of the breach and shore protection structures with damages estimated at \$18,000,000. A recurrence of the March 1962 storm would have caused damages of approximating \$56,000,000 (October 1989 price levels) without the project in place. A 100 year event would cause storm damage by wave attack in excess of \$156,000,000 at October 1993 prices. Project implementation has eliminated these damages.

Division: North Atlantic

District: New York

Atlantic Coast of New York City, Rockaway Inlet to  
Norton Point, Coney Island, NY

JUSTIFICATION: (continued)

Average annual benefits are as follows:

Benefits	Amount
Shoreline Protection	\$6,780,000
Recreation	1,040,000
Total	\$7,820,000

Fiscal Year 2003 The requested amount will be applied as follows:

Continue Nourishment Contract #2	\$ 350,000
Planning, Engineering and Design (Post-Construction Monitoring)	\$ 100,000
Total	\$ 450,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the Requirements listed below:

	Payments During Construction and Reimbursement	Annual Operation, Maintenance, and Replacement Costs
Requirement of Local Cooperation		
Pay 35 percent of the costs of periodic nourishment allocated to storm damage reduction and 50 percent of the costs allocated to recreation, bear all costs of operation, maintenance and replacement of storm reduction facilities	\$ 55,900,000	\$950,000
Total Non-Federal Costs	\$ 55,900,000	\$950,000

STATUS OF LOCAL COOPERATION: The non-Federal sponsor for this project is the New York State Department of Environmental Conservation. The Local Cooperation Agreement for this project was executed in October 1993. The previously executed PCA will be modified to incorporate the non-Federal share of 65 percent of the cost of periodic nourishment for FY02 and beyond before initiating the proposed FY02 construction effort.

Division: North Atlantic

District: New York

Atlantic Coast of New York City, Rockaway Inlet to  
Norton Point, Coney Island, NY

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$103,800,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$76,500,000) presented to Congress (FY 2002) includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 4,200,000
Change Assumed Cost Share	23,100,000
Total	\$27,300,000

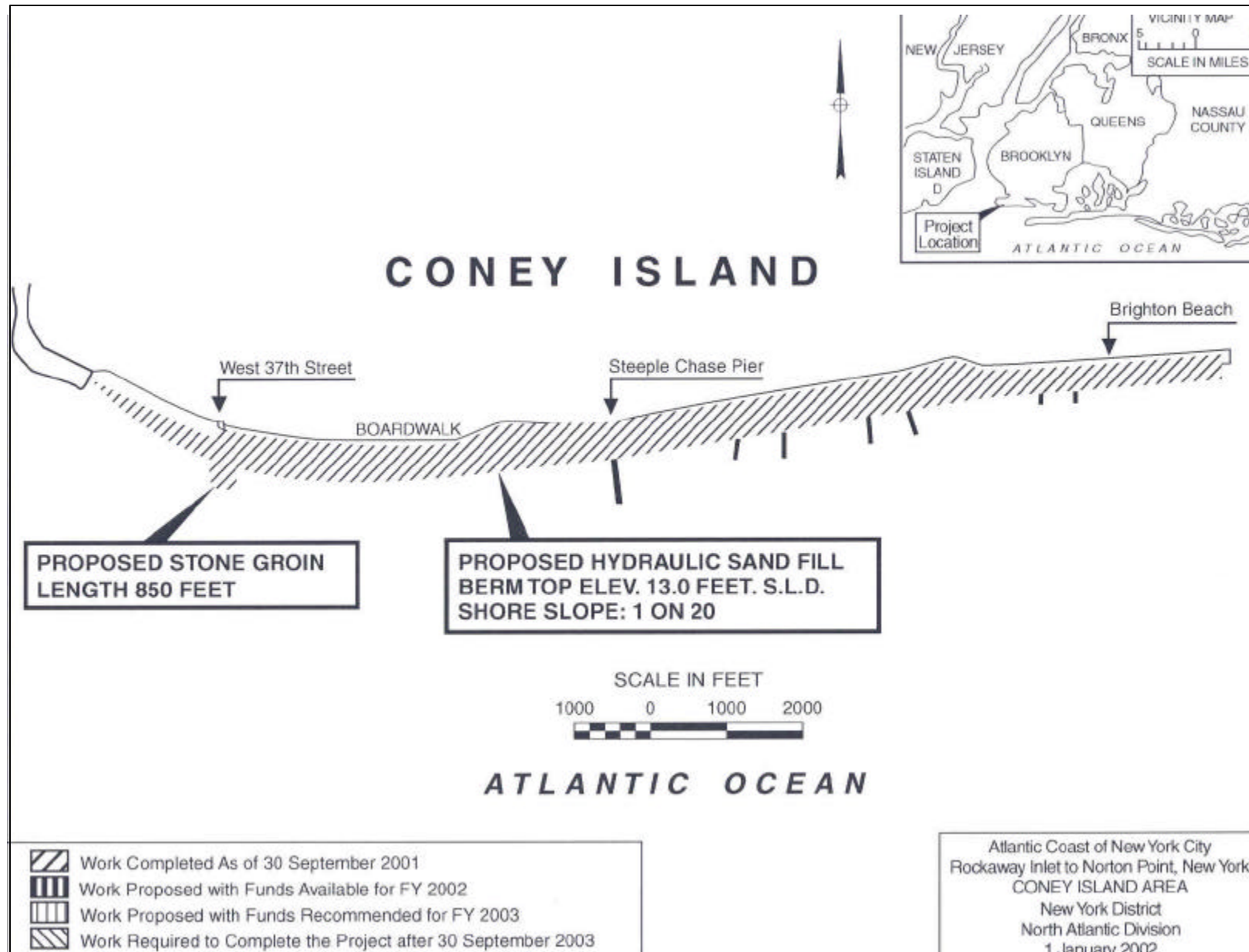
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Supplemental Environmental Impact Statement was filed with the United States Environmental Protection Agency on 5 June 1992.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1992.

Division: North Atlantic

District: New York

Atlantic Coast of New York City, Rockaway Inlet to  
Norton Point, Coney Island, NY



APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, New York (Continuing)

LOCATION: The project is located on the South shore of Long Island between East Rockaway Inlet and Rockaway Inlet, approximately seven miles southeast of the Battery, New York City. The coastal area is a peninsula located entirely within the Borough of Queens, New York City. The project also includes the lands within and surrounding Jamaica Bay. The greater portion of Jamaica Bay lies in the Boroughs of Brooklyn and Queens, New York City, with a small section at the easterly end, known as Head of Bay in Nassau County, New York.

DESCRIPTION: The authorized project work consists of nourishing a 100 to 200 foot wide beach at an elevation of 10 feet above mean low water from Beach 149th Street to Beach 19th Street.

AUTHORIZATION: Water Resources Development Act of 1974 and Water Resources Development Act of 1986 (Section 934).

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because initial construction has been completed.

TOTAL BENEFIT-COST RATIO: Not applicable because initial construction has been completed.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 5 1/2 percent (FY 1974).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in June 1993 at December 1992 prices.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		62,600,000			
Initial Construction	8,813,500				
Periodic Nourishment	45,486,500				
Contracts 1-5	16,386,500		Contract No. 6	100	Nov 1996
Contracts 6-8	29,100,000		Contract No. 7	100	Nov 2001
			Contract No. 7A	0	Sep 2004
			Contract No. 8	0	Sep 2004
			Entire Project	67	Sep 2004
			Beach Nourishment	67	Sep 2004

Division: North Atlantic

Division: New York

East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, NY

SUMMARIZED FINANCIAL DATA: (continued)

Estimated Non-Federal Cost		45,400,000
Initial Construction	8,813,500	
Periodic Nourishment	36,585,500	
Contracts 1-5	16,386,500	
Contracts 6-8	20,184,000	
Other Costs	16,000	
Total Estimated Project Cost		108,000,000

Initial Construction	17,627,000	
Periodic Nourishment	90,357,000	
Other Costs	16,000	
Allocation to 30 September 2001	43,182,000	
Conference Allowance for FY 2002	2,284,000	
Allocation for FY 2002	919,000	1/
Allocations through FY 2002	44,101,000	70
Allocation Requested for FY 2003	1,000,000	72
Programmed Balance to Complete		
after FY 2003	17,499,000	
Unprogrammed Balance to Complete	0	
after FY 2003		

1/ Reflects \$365,000 reduction assigned for savings and slippage and \$1,000,000 reprogrammed from the project.

JUSTIFICATION: The Rockaway peninsula is subject to frequent and severe damage from tidal inundation from the ocean and the bay. Along the oceanfront, a serious erosion problem has resulted from storms which reduce beach widths, expose waterfront development from wave attack, and cause loss of recreational beach area. The project area is approximately 4 miles of urban shorefront, principally used for recreation purposes. Large sections of the high water beach periodically erodes. Unusually severe storms occurred in September 1921, September 1960, March 1962, and April 1967. The September 1960 storm caused maximum storm tide of record, flooded 3,500 acres of developed land, and resulted in losses exceeding \$17,800,000. About 6,000 residences and hundreds of commercial buildings were severely damaged. Boats and waterfront facilities were badly hit. Public utilities and transportation were seriously disrupted. The project area was included in declared disaster areas after the September 1960 and March 1962 storms. Appreciable damage resulted from the April 1967 storm, causing local agencies to place about 250,000 cubic yards of beach fill under emergency conditions at an estimated cost of \$400,000. In October 1991 and December 1992, the area experienced flooding

ACCUM.  
PCT. OF EST.  
FED. COST

PHYSICAL DATA  
Original Periodic Nourishment of the beach between Beach 19th Street and Beach 149th Street, a distance of 4 2 miles, to maintain the berm to a width of 100-200 feet at elevation 10 feet above mean low water.

Division: North Atlantic

District: New York

East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, NY

JUSTIFICATION: (continued)

and beach erosion. A Presidential disaster was declared for the area following the December 1992 storm. The reevaluation conducted under Section 934 of WRDA 1986 recommended continued Federal participation in three additional periodic nourishment cycles for the storm damage reduction features of the project. The Section 934 reevaluation report also recommended further analyses to determine whether modifications to the project are warranted to reduce the cost of future periodic nourishment. Based on the reevaluation conducted under Section 934 of WRDA of 1986, the average annual benefits are as follows:

Storm Damage Reduction	\$ 3,400,000
Recreation	6,370,000
Total	\$ 9,770,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

Reformulation Study	\$ 750,000
Initiate Periodic Nourishment Contract #8	\$ 100,000
Planning, Engineering and Design	\$ 100,000
Construction Management	\$ 50,000
Total	\$ 1,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the Requirements listed below:

	Payments During Construction and Reimbursement	Annual Operation, Maintenance and Replacement Costs
REQUIREMENTS OF LOCAL COOPERATION:		
Pay 50 percent of initial construction cost and nourishment operations 1-5	\$25,200,000	
Pay 35 percent of the periodic nourishment costs allocated to storm damage reduction, and 50 percent of the costs allocated to recreation, bear all costs of operation, maintenance, and replacement of storm reduction facilities	20,184,000	
Provide lands, easements, and rights of way	16,000	
Total Non-Federal Costs	\$45,400,000	\$0

Division: North Atlantic      District: New York      East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, NY



STATUS OF LOCAL COOPERATION: The non-Federal sponsor for this project is the New York State Department of Environmental Conservation. The project cooperation agreement (PCA) for this project, to extend the beach nourishment period was executed in May 1995. The New York State Department of Environmental Conservation was the sponsor for the initial project in 1975 and for the first five nourishment operations through 1988.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$62,600,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$55,000,000) presented to Congress (FY 2002) includes the following items:

Item	Amount
Price escalation on Contract Level	\$ 2,400,000
Change in Assumed Cost Share	5,200,000
Total	\$ 7,600,000

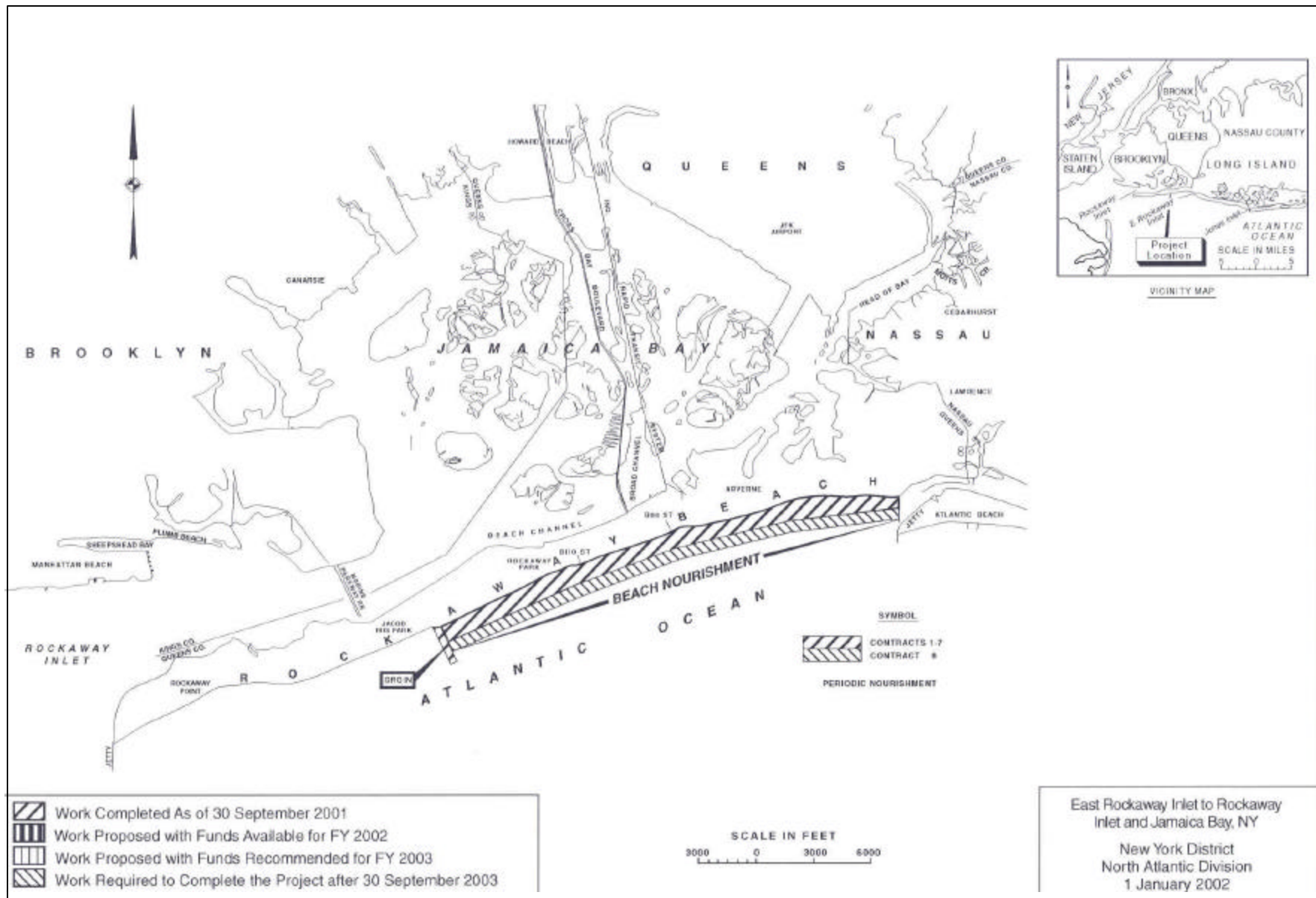
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 13 May 1974 for the initial project and nourishment. An Environmental Assessment for the extension of beach nourishment was filed with the United States Environmental Protection Agency in April 1994.

OTHER INFORMATION: Funds for initial construction were appropriated in FY 1974. Funds for the original 5 cycles of periodic nourishment were appropriated through FY 1988. Funds to initiate the continuation of periodic nourishment were appropriated in FY 1994. The periodic nourishment period has been extended for an additional 3 nourishment cycles under authority of Section 934 of the Water Resources Development Act of 1986.

Division: North Atlantic

District: New York

East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, NY



4 February 2002

182

APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Fire Island Inlet to Jones Inlet, New York (Continuing)

LOCATION: Fire Island Inlet is located approximately 40 miles East of the Battery in New York City. The material dredged from the inlet will be placed in the vicinity of Gilgo Beach which lies along the Atlantic Ocean Shoreline of New York State in Suffolk County. The beach is located approximately 6 miles west of Fire Island and extends 14,000 feet to the westerly end of Gilgo Beach.

DESCRIPTION: The project is a multi-purpose beach erosion control and navigation project. The recommended plan of action is the continuation of construction of the authorized combined purpose project because of serious erosion problems threatening the shoreline. This involves placing approximately 1,000,000 cubic yards of sand every two years, from the inlet, along Gilgo Beach to serve as a feeder beach for the area. All work is programmed.

AUTHORIZATION: 1958 Rivers and Harbors Act and 1962 Rivers and Harbors Act, as amended by section 506(b)(5) of the Water Resources Development Act of 1996.

REMAINING BENEFITS-REMAINING COST RATIO: 2.2 to 1 at 3 1/4 percent.

TOTAL BENEFIT-COST RATIO: 2.2 to 1 at 3 1/4 percent.

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 3 1/4 percent (FY 1970).

BASIS OF BENEFITS-COST RATIO: Operations and Maintenance Proposal for Fire Island Inlet, dated October 1991 at October 1991 price levels.

Division: North Atlantic

District: New York

Fire Island Inlet to Jones Inlet, NY

SUMMARIZED FINANCIAL DATA:			ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		238,000,000		Periodic		
Initial Construction	9,300,000			Nourishment	17	Sep 2039
Periodic Nourishment	228,700,000					
PHYSICAL DATA						
Estimated Non-Federal Cost		78,700,000		The project consists of providing a navigation channel and hydraulically placing the dredged material which is 90 percent sand along the shoreline in the vicinity of Gilgo Beach, New York		
Initial Construction	3,100,000					
Cash Contributions	3,100,000					
Other Costs	0					
Periodic Nourishment	75,600,000					
Cash Contributions	75,600,000					
Other Costs	0					
Total Estimated Project Cost		316,700,000				
Initial Construction	12,400,000					
Periodic Nourishment	304,300,000					
Allocations to 30 September 2001		35,606,000				
Conference Allowance for FY 2002		7,700,000				
Allocations for FY 2002		6,469,000 <u>1/</u>				
Allocation through FY 2002		42,075,000	18			
Allocation Requested for FY 2003		500,000	18			
Programmed Balance to Complete after FY 2003		195,425,000				
Unprogrammed Balance to Complete after FY 2003		0				

1/ Reflects \$1,231,000 reduction assigned as savings and slippage.

Division: North Atlantic

District: New York

Fire Island Inlet to Jones Inlet, NY

JUSTIFICATION: Construction of the authorized combined purpose project will alleviate serious erosion problems threatening the shoreline. Loss of sand due to lack of bypassing has resulted in a serious erosion problem at Gilgo Beach which is threatening the shoreline which protects a state highway and the Suffolk Counts sewer outfall. The situation has already resulted in two critical areas, and is projected to result in more critical areas in the foreseeable future if erosion is not arrested. Sand from the combined project will ensure adequate protection against continued shoreline erosion. Average annual benefits are as follows:

Annual Benefits	Amount
Shoreline Protection	\$ 2,500,000
Road Protection	3,400,000
Protection to Outfall	63,000
Total	\$ 5,963,000

FISCAL YEAR 2003: The requested amount will be applied as follows:

Initiate Contract 7	292,000
Planning, Engineering, and Design	176,000
Construction Management	32,000
Total	\$ 500,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance and Replacement Costs
Pay 35 percent of the periodic nourishment cost and dredged material disposal	\$ 78,700,000	
Total Non-Federal Costs	\$ 78,700,000	\$ 0

STATUS OF LOCAL COOPERATION: The non-Federal sponsor for this project is the New York State Department of Environmental Conservation. In accordance with paragraph 1.a (2) of the agreement between the United States of America and the State of New York, signed on 19 June 1973, for local cooperation at Fire Island Inlet & Shore Westerly to Jones Inlet, New York, the non-Federal sponsor is responsible for 17.4 percent of the periodic nourishment cost of the basic project, presently estimated at \$600,000 annually. The nourishment cycle is anticipated to occur every two years; therefore; the non-Federal share will be \$1,200,000 every two years.

Division: North Atlantic

District: New York

Fire Island Inlet to Jones Inlet, NY

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$238,000,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$119,300,000) presented to Congress (FY 2002) includes the following items:

Item	Amount
Change in Assumed Cost Share	\$ 118,700,000
Total	\$ 118,700,000

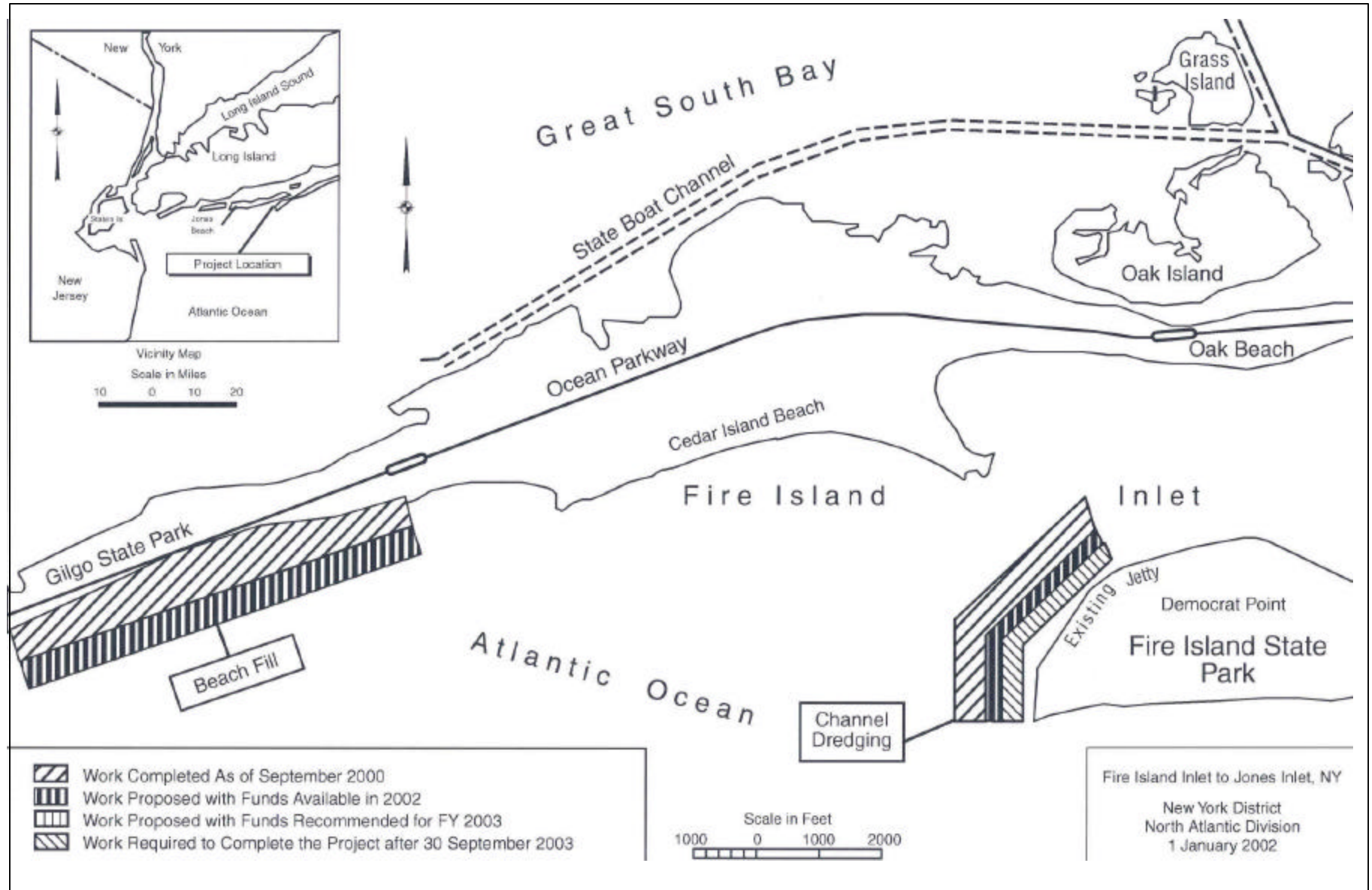
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Environmental Impact Statement was filed with the U.S. Department of Environmental Protection on 1 April 1987. A finding of No Significant Impacts was completed on 4 August 1987.

OTHER INFORMATION: Funds were appropriated to initiate construction in FY 1970. During the 1980's this project was undertaken utilizing offshore disposal for sand bypassing under operation and maintenance authority and funding. In March 1988, a plan was recommended for solving both the erosion and navigation needs of the area which is in conformance with the multipurpose project as formulated in the authorizing document and subsequently developed in the General Design Memorandum. The proposed plan was engineered to substantially reduce costs while still providing the required storm protection and the majority of navigation improvements benefits not currently accruing to the natural channel (single purpose project). The proposal which is in accordance with the authorizing document is to maintain a degree of safety to the vessels using the channel during the periods of high waves. Approximately 1,000,000 cubic yards of dredged sand will be hydraulically placed along the shoreline in the vicinity of Gilgo Beach, for shore protection purposes. The plan was approved by the Assistant secretary of the Army for Civil Works on 2 August 1988.

Division: North Atlantic

District: New York

Fire Island Inlet to Jones Inlet, NY



APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Fire Island Inlet to Montauk Point, New York (Continuing)

LOCATION: The overall project area, extends from Fire Island Inlet easterly to Montauk Point along the Atlantic Coast of Suffolk County. The project is about 83 miles long and comprises about 70 percent of the total ocean frontage of Long Island. Fire Island Inlet is located about 50 miles by water East of the Battery, New York City.

DESCRIPTION: The project provides for beach erosion control and hurricane protection along five reaches of the Atlantic Coast of New York from Fire Island Inlet to Montauk Point. Work includes widening the beaches along the developed areas to a minimum width of 100 feet at an elevation of 14 feet above mean sea level and by raising dunes to an elevation of 20 feet above mean sea level from Fire Island Inlet to Hither Hills State Park and at Montauk and opposite Lake Montauk Harbor, supplemented by grass planting on the dunes, interior drainage structures, construction of up to 50 groins, and subsequent periodic beach nourishment. A reformulation study is underway to evaluate storm damage protection measures. An interim project at Westhampton Beach has been constructed prior to completion of an ongoing overall project reformulation effort. This interim project provides for 30 years of periodic nourishment to maintain a beach berm extending westwardly from Groin 15 to Moriches Inlet at an elevation of 9.5 feet above mean sea level backed by a dune with a height of +15 feet above msl. The Westhampton Beach Interim project also includes tapering of the existing westernmost two groins, construction of a new groin between groins 14 and 15, and beachfill as necessary within the existing groinfield to promote sand transport. A Breach Contingency Plan has been developed which permits closing of breaches of the barrier island with use of a pre-approved Project Cooperation Agreement format, provided that estimated breach costs are no greater than \$5 million. Studies are also underway for potential interim project to protect the area of west of Shinnecock Inlet. The study for an interim project along Fire Island has been deferred due to the lack of a non-federal sponsor.

AUTHORIZATION: River and Harbor Act 14 July 1960, modified by the Water Resources Development Act of 1974, the Water Resources Development Act of 1986, and the Water Resources Development Act of 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 2.6 to 1 at 2 5/8 percent.

TOTAL BENEFIT-COST RATIO: 2.6 to 1 at 2 5/8 percent.

INITIAL BENEFIT-COST RATIO: 2.6 to 1 at 2 5/8 percent (FY 1963).

Division: North Atlantic

District: New York

Fire Island Inlet to Montauk Point, NY



## SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		567,200,000
Programmed Construction	135,600,000	
Initial Construction	72,900,000	
Periodic Nourishment	62,700,000	
Unprogrammed Construction	431,600,000	
Initial Construction	60,000,000	
Periodic Nourishment	371,600,000	
Estimated Non-Federal Cost		308,300,000
Programmed Construction	65,600,000	
Initial Construction	12,600,000	
Cash Contributions	10,000,000	
Other Costs	2,600,000	
Periodic Nourishment	53,000,000	
Cash Contribution	53,000,000	
Other Costs	0	
Unprogrammed Construction	242,700,000	
Initial Construction	111,400,000	
Cash Contributions	101,050,000	
Other Costs	10,350,000	
Periodic Nourishment	131,300,000	
Cash Contribution	131,300,000	
Other Costs	0	
Total Estimated Programmed Construction	201,200,000	
Initial Construction	85,500,000	
Periodic Nourishment	115,700,000	

STATUS:  
(1 Jan 2002)

PERCENT  
COMPLETE

COMPLETION  
SCHEDULE

Reach 2		
11 groins	100	Oct 1966
4 groins	100	Nov 1970
8 groins	0	<u>1/</u>
Westhampton Interim	40	Dec 2027
Initial Construction	100	Dec 1997
Periodic Nourishment	10	Dec 2027
Balance of Reach	0	<u>1/</u>
Reach 4		
2 groins	100	Sep 1965
Beach Fill-18.4 mi.	0	<u>1/</u>
Balance of Project		
Dune/Beach Fill-39.7 mi.	0	<u>1/</u>
27 groins	0	<u>1/</u>
Reformulation Study	60	Jun 2004
Studies for Interim Projects		
Fire Island	90	<u>2/</u>
West of Shinnecock	95	Jun 2002
Beach Contingency Plan	100	Jan 1996

1/ Schedule is dependent on the outcome of the Reformulation effort.

2/ Study terminated due to lack of a non-federal sponsor and unresolved environmental issues that will be addressed in the overall reformulation effort.

## PHYSICAL DATA

Dunes and beach replenishment: 73,5 miles  
Dunes: raise to elevation 20 feet above msl  
Beaches: widen to a minimum of 100 ft.  
Interior drainage structures: 3 gated culverts  
Groins: 52  
Periodic nourishment: 480,000 cubic yards/yr

Division: North Atlantic

District: New York

Fire Island Inlet to Montauk Point, NY

		ACCUM.
		PCT. OF EST.
SUMMARIZED FINANCIAL DATA (Contd.)		FED. COST
Total Estimated Unprogrammed Construction Cost		674,300,000
Initial Construction	171,400,000	
Periodic Nourishment	502,900,000	
 Total Estimated Project Cost		875,500,000
Initial Construction	256,900,000	
Periodic Nourishment	618,600,000	

Allocations to 30 September 2001	61,405,000	
Conference Allowance for FY 2002	2,275,000	
Allocation for FY 2002	1,911,000	<u>1/</u>
Allocations Through FY 2002	63,316,000	11
Allocation Requested for FY 2003	2,750,000	12
Programmed Balance to Complete		
After FY 2003	69,534,000	
Unprogrammed Balance to Complete		
After FY 2003	431,600,000	

1/ Reflects \$364,000 reduction assigned as savings and slippage.

JUSTIFICATION: Erosion has seriously reduced the width of the shoreline in the study area with consequent exposure of the shore and the mainland to wave attack and inundation damages. A recurrence of the hurricane tide of record (September 1938) when 45 lives were lost, would cause inundation and wave damage estimated at \$717,000,000 (April 1996 price levels). As a result of the 11 December 1992 storm, in the Westhampton area (Section 1B of Reach 2), over 200 residential structures were destroyed and two breaches of the barrier island occurred. Closure costs for these breaches in 1992 was approximately \$6,600,000.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Reformulation Study	1,360,000
Westhampton Interim (post construction monitoring)	431,000
Continue West of Shinnecock construction	540,000
Initiate Nourishment Contract # 2 (Westhampton Beach)	269,000
Planning, Engineering and Design (Westhampton Beach)	130,000
Construction Management	20,000
 Total	 \$ 2,750,000

Division: North Atlantic

District: New York

Fire Island Inlet to Montauk Point, NY

NON-FEDERAL COSTS: Local interests are required to bear 30 percent of the total project cost including periodic nourishment, for the Westhampton Interim project and 35 percent of the total project cost for the Reformulation project, which includes the value of lands, easements, and rights-of-way.

	Payments During Construction and Reimbursements	Annual Operation Maintenance and Replacement Costs
Requirements of Local Cooperation:		
Provide all lands, easements, and rights-of-way, and relocations.	\$ 12,950,000	
Pay 30 percent of the first costs for the Westhampton Interim project and 35 percent of the first costs for the remainder of the project including creditable lands and easements and rights of way, and bear all costs of operation and maintenance and replacement of storm damage reduction facilities.	111,050,000	
Pay 35 percent of the periodic nourishment cost	184,300,000	
Total Non-Federal Costs	\$308,300,000	\$0

STATUS OF LOCAL COOPERATION: The agency responsible for local cooperation is the New York State Department of Environmental Conservation (NYSDEC). Assurances of local cooperation were executed by the NYSDEC on 14 August 1963 and accepted by the Federal Government on 20 August 1963. A project cooperation agreement (PCA) for the Westhampton Interim project was executed in February 1996. A PCA for the West of Shinnecock project is expected to be executed by August 2002.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$567,200,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$403,400,000) presented to Congress (FY 2002) includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 3,300,000
Change in Assumed Cost Share	160,500,000
Total	\$ 163,800,000

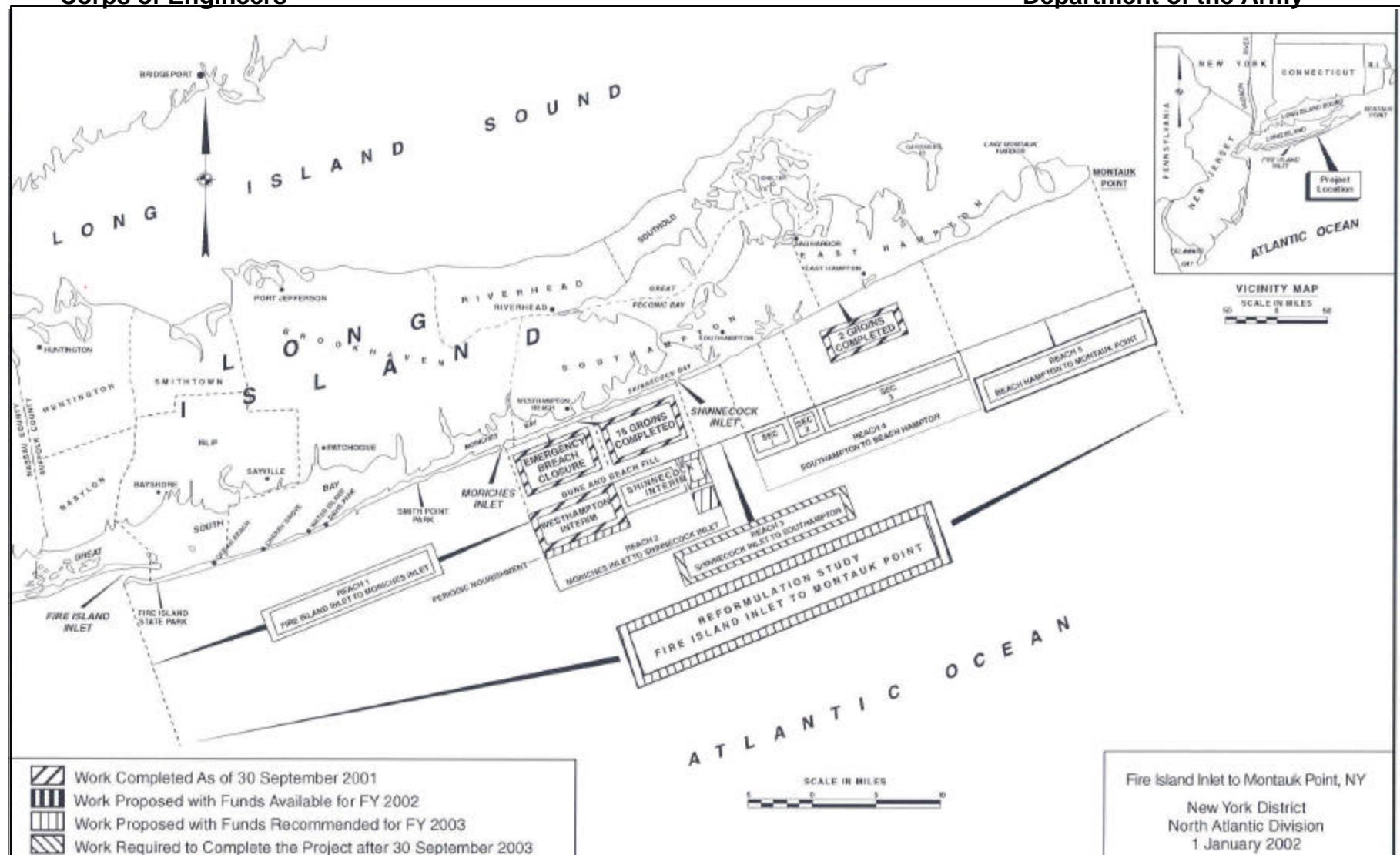
Division: North Atlantic

District: New York

Fire Island Inlet to Montauk Point, NY

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (USEPA) on 28 January 1978. On 7 March 1978, the Department of the Interior (DOI), supported by other agencies referred the EIS to the Council on Environmental Quality (CEQ) as unacceptable. Subsequent to the strong objections on the projects final environmental impact statement, meetings were held between September 1978 and January 1980 with DOI, USEPA, U.S. Department of Commerce, and NYSDEC. Two public scoping meetings were held in October 1979. Subsequently, the Federal agencies agreed to a basis for the reformulation of the Fire Island to Montauk Point project, including a general agreement on the studies necessary to answer the outstanding concerns. An environmental analysis was included in Supplement No. 2 to GDM No. 1 to determine environmentally acceptable measures of beach protection for the critically eroded areas at Westhampton Beach.

OTHER INFORMATION: Initial planning and construction funds were appropriated in FY 1963. The work remaining to be done is completion of construction of Reach 2-Moriches Inlet to Shinnecock Inlet, Reach 4-Southampton to Beach Hampton, initiation of construction of Reach 1-Fire Island Inlet to Moriches Inlet, Reach 3-Shinnecock to Southampton, and Reach 5-Beach Hampton to Montauk, as well as the completion of the reformulation effort. The Corps of Engineers concurred with the request by the State of New York to initially construct 11 groins (Reach 2), and 2 groins (Reach 4) with beach fill to be added as necessary but not sooner than 3 years after groin completion. In recognition of the critical condition of the beaches due to earlier storms, the Corps recommended to the State in June 1967 that the 3 year observation period be waived and that construction of urgent hurricane protection be resumed. The State concurred and requested that work be undertaken on additional groins, replacement of beach fill and dunes in Reach 2, as well as construction of groins, drainage structures and dune fill in Reach 4. Suffolk county, however, did not endorse the placement of beach and dune fills. Continuing negotiations during FY 1969 resulted in agreement on a plan for construction for certain groins, drainage structures, beach fill, and dunes to an interim height of 16 feet in Reaches 2 and 4. In December 1973, the State requested planning for Reach 2 (Section 1b), (Westhampton Beach) and Reach 4 (Georgica Pond), indicating that it would provide funds. Planning resumed and assurances were requested from the State in October 1974. However, strong opposition developed with Suffolk County and the county legislature refusing to provide support. Subsequently, erosion of the shoreline downdrift of the groin field at Westhampton Beach accelerated to the point where Dune Road, the only access to the homes in this area, was under water during normal high tide. In December 1992, two breaches occurred in the barrier island near Westhampton Beach, which were subsequently closed. An interim plan for the severely eroded Westhampton Beach area was prepared in June 1994, which provides for a lower level of protection than that provided in the original authorization. This interim plan has been designed such that it could be modified based on future recommendations in the to-be-completed Reformulation study. The USEPA and DOI agreed in concept to the interim plan, provided that a full environmental assessment and/or environmental impact study was completed, and the reformulation of the overall project was reinstated. The estimated cost of the reformulation effort is \$24 million. The reformulation study is scheduled for completion in June 2004. In the interim studies are underway to assess the feasibility of interim projects along Fire Island and west of Shinnecock Inlet. The cost of these interim studies is \$4 million. Additionally, a Breach Contingency Plan was approved in January 1996 to provide for rapid response to breaches along the islands while awaiting completion of the reformulation study.



APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Virginia Beach, Virginia (Hurricane Protection) (Continuing)

LOCATION: The city of Virginia Beach is located on the eastern coast of Virginia bordered by the Atlantic Ocean on the east, Chesapeake Bay on the north, the cities of Norfolk and Chesapeake on the west, and North Carolina on the south.

DESCRIPTION: The plan of improvement includes construction of a vertical steel sheet-pile wall with concrete cap extending from Rudee Inlet to 58th Street, enhancement of the existing dune system between 58th Street and 89th Street, construction and periodic renourishment of a widened and raised beach berm between Rudee Inlet and 89th Street, a new boardwalk integrated with the vertical wall and placed over the existing boardwalk extending from Rudee Inlet to approximately 40th Street, a storm water runoff system consisting of the offshore discharge by pumped flow through submarine pipelines, appropriate beach access structures consisting of ramps and stairs and dune crossover facilities.

AUTHORIZATION: The project is authorized for construction by the Water Resources Development Act of 1986, as modified by the Water Resources Act of 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 to 1 at 8 percent

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 8 percent

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 8 percent (FY 1996)

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in July 1994 at October 1993 price levels.

Division: North Atlantic

District: Norfolk

Virginia Beach, VA (Hurricane Protection)

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		247,000,000		Initial construction	85	Sep 2002
Initial Construction	66,836,000			Periodic nourishment	0	Sep 2052
Periodic Nourishment	180,164,000			Entire Project	21	Sep 2052
PHYSICAL DATA						
Estimated Non-Federal Cost		133,000,000		Approximately 20,600 LF of vertical sheet-		
Initial Construction	35,989,000			pile seawall with concrete cap between		
Cash Contributions	35,876,000			Rudee Inlet and 58th Street which will be		
Other Costs	113,000			integrated into a new boardwalk between		
Periodic Nourishment	97,011,000			Rudee Inlet and 40th Street, enhanced dune		
Cash Contributions	97,011,000			system between 58th and 89th Street at		
Other Costs	0			elevation 18 ft NGVD and 25 ft crest		
Total Estimated Project Cost		380,100,000		width, beach berm between Rudee Inlet		
Initial Construction	102,825,000			and 89th Street at elevation 9 ft NGVD		
Periodic Nourishment	277,175,000			and 100 ft crest width, pumped ocean		
				discharge drainage system. Periodic		
				nourishment of beach berm between		
				Rudee Inlet and 89th Street (6.2 miles)		
				50-year project life.		
Allocations to 30 September 2001		59,274,000				
Conference Allowance for FY 2002		9,000,000				
Allocation for FY 2002		7,562,000	1/			
Allocations through FY 2002		66,836,000		17		
Allocation Requested for FY 2003		120,000		17		
Programmed Balance to Complete after FY 2003		180,494,000				
Unprogrammed Balance to Complete after FY 2003		0				

1/ Reflects \$1,438,000 reduction assigned as savings and slippage

JUSTIFICATION: The major problem along the Virginia Beach coastline is the vulnerability of portions of the beach and adjacent development to direct wave attacks during major storms and hurricanes. The most severe hurricane to affect the Virginia Beach area was that of August 1933 where tidal heights reached approximately 9 ft NGVD. In March 1962, a severe northeastern storm caused breaching and failing of bulkheads and dunes, and severe erosion along the beachfront. The intruding waters caused structural damage to buildings behind the bulkheads and dunes which resulted in damages of approximately \$9,000,000 (March 1962 price level) to the Virginia Beach area. Although the 1933 hurricane was of greater magnitude, the damaging effect of the 1962 northeaster was the greatest of any storm in the area due to the increased development along the shoreline between 1933 and 1962 and the duration of the storm over several high tides. The average annual benefits amount to \$13,853,000 for storm damage reduction based on October 1993 price levels.

Division: North Atlantic

District: Norfolk

Virginia Beach, VA (Hurricane Protection)

JUSTIFICATION: (continued)

Without a storm protection project, damages to commercial, residential and public developments and to existing protective works along the Atlantic Ocean between Rudee Inlet and 89th Street are estimated at \$106 million at 1993 price levels for a repeat of the August 1933 hurricane and \$64 million for a repeat of the March 1962 storm.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Periodic Nourishment      \$ 120,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	\$ 113,000	
Pay 35 percent of the costs allocated to hurricane and storm damage reduction, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of hurricane and storm damage reduction facilities.	35,876,000	\$1,528,000
Pay 35 percent of the cost of periodic nourishment.	97,011,000	
Total Non-Federal Costs	\$133,000,000	\$1,528,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The city of Virginia Beach, Virginia is the local sponsor. The city has indicated their support for the recommended project and signed the PCA on 27 June 1996.

Division: North Atlantic

District: Norfolk

Virginia Beach, VA (Hurricane Protection)



COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$247,000,000 includes both an increase in project costs and a change in the assumed Federal cost share to reflect the requirements of current law. The Administration is considering proposing changes to the cost share for shore protection projects. The change in the Federal cost estimate relative to the latest estimate (\$187,000,000) presented to Congress (FY 2002) includes the following items:

Item	Amount
Price escalation on Construction Features	\$ 1,550,000
Change in Assumed Cost Share	58,450,000
Total	\$ 60,000,000

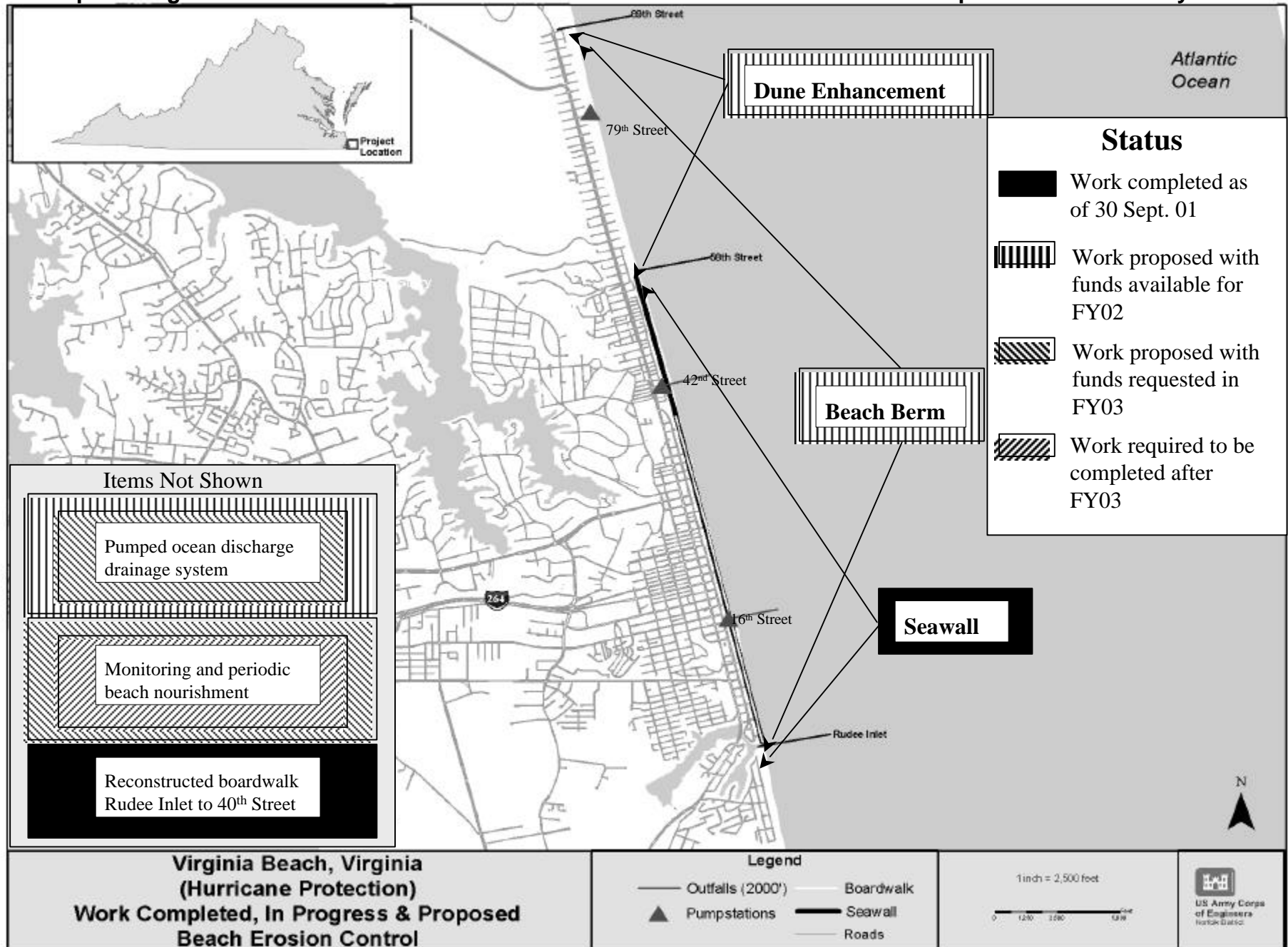
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement (FEIS) was filed with the Presidents Council on Environmental Quality (CEQ) on 19 September 1972 and a supplement was issued on 22 February 1985. An Environmental Assessment was completed and a Finding of No Significant Impact (FONSI) was signed in May 1994.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986. Funds to initiate construction were appropriated in FY 1996.

Division: North Atlantic

District: Norfolk

Virginia Beach, VA (Hurricane Protection)



APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Passaic River Preservation of Natural Storage Areas, New Jersey (Continuing)

LOCATION: The project is located in Morris, Essex and Passaic Counties, New Jersey

DESCRIPTION: This project element involves the acquisition of 5,350 acres of natural floodplain storage areas in the Central Passaic River Basin to preserve them from future development. This measure is a flood damage reduction element that will prevent increases in flood flows that would be caused by the loss of these areas to new development. This acquisition, in conjunction with nearly 16,000 acres already protected under existing Federal and State programs, will preserve the flood storage and environmental characteristics of the Central Basin wetlands.

AUTHORIZATION: Water Resources Development Act of 1990, Section 101(a)(18) as modified by Section 102(p) of WRDA 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 1.2 to 1 at 7 3/8 percent.

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 7 3/8 percent.

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 7 3/8 percent (FY 1998).

BASIS OF BENEFIT-COST RATIO: Benefits and costs are from the Final General Design Memorandum dated July 1996 at October 1994 price levels, approved 30 October 1996 and updated in FY 1998.

SUMMARIZED FINANCIAL DATA	ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2002) Entire Project	PERCENT COMPLETE 0	PHYSICAL COMPLETION SCHEDULE Sep 2006
Estimated Federal Cost	20,500,000			
Estimated Non-Federal Cost	1,700,000			
Total Estimated Project Cost	22,200,000			
		PHYSICAL DATA		
		Nonstructural Flood Control: Acquisition of approximately 5,350 acres of natural floodplain storage areas in the Passaic River Basin		
Allocations to 30 September 2001	4,705,000			
Conference Allowance for FY 2002	5,400,000			
Allocation for FY 2002	4,537,000	1/		
Allocation through FY 2002	9,242,000	45		
Allocation Requested for FY 2003	3,000,000	78		
Programmed Balance to Complete				
After FY 2003	8,258,000			
Unprogrammed Balance to Complete				
After FY 2003	0	1/ Reflects \$ 863,000 reduction assigned as savings and slippage.		
Division: North Atlantic	District: New York	Passaic River Preservation of Natural Storage Areas, NJ		

JUSTIFICATION: The Passaic River Basin suffers average annual damages of \$116,016,000 (Oct. 1994 price levels). Properties experiencing damage include residential, commercial, industrial, public and municipal facilities. There are approximately 19,500 structures in the 100-year floodplain. The most severe recent flood occurred in April 1984, claiming 3 lives, with damages estimated at \$493,000,000. The entire basin, or portions thereof, was declared a disaster area in 1968, 1971, 1972, 1973, twice in 1975 1984, and 1992. The recurrence of the October 1903 flood of record would cause damages of \$2,492,000,000. The project does not support development of the floodplain directly or indirectly. Of the 5,350 acres to be acquired, approximately 5,200 are wetlands. The acquisition of the natural storage areas, in conjunction with maintenance of the existing floodways in acquisition areas, would maintain the environmental characteristics of the basin by preserving wetlands, open space and fish and wildlife habitats. Average annual benefits (Inundation Reduction) are \$1,826,300.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Acquisitions	\$2,600,000
Construction Management	400,000
Total	\$3,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation:		
Lands already acquired by sponsor for project and to be maintained with project cooperation agreement.	\$ 1,700,000	\$ 218,000
Pay 25 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103 (m) of the Water Resources Development Act of 1986 to reflect the non-Federal sponsors ability to pay, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities. Credits as per WRDA 1990/92 will reduce Non-Federal cash share by \$3,850,000 from \$3,850,000 to \$0	\$ 0	\$ 0
Total non-Federal Costs	\$ 1,700,000	\$ 218,000

Division: North Atlantic

District: New York

Passaic River Preservation of Natural Storage Areas, NJ

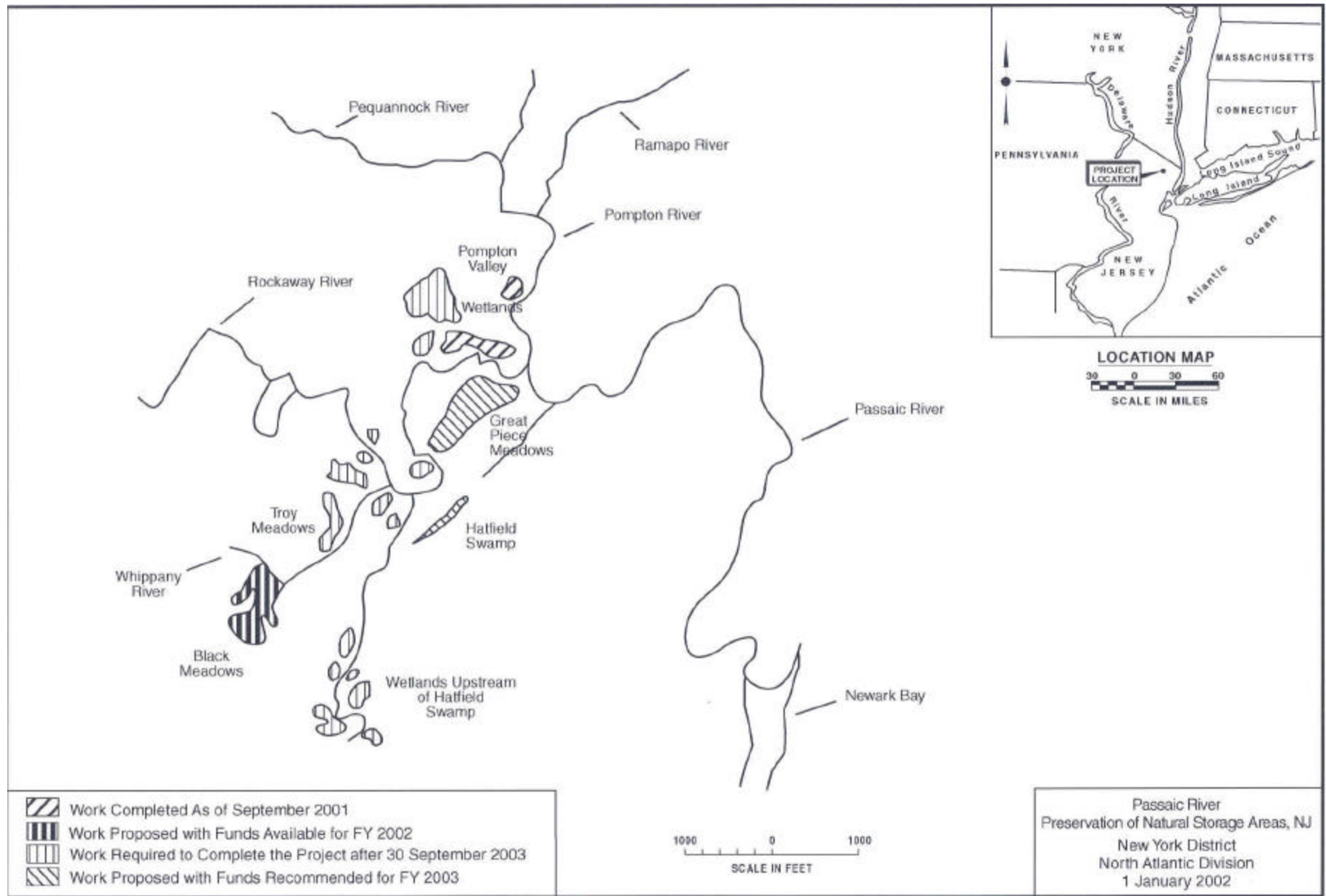
STATUS OF LOCAL COOPERATION: The State of New Jersey, through its Department of Environmental Protection (NJDEP), is the non-Federal sponsor. The PCA was executed in June 1999.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$20,500,000 is an increase of \$800,000 over the latest estimate (\$19,700,000) presented to Congress (FY 2002). The change includes the following item:

Item	Amount
Price Escalation on Construction Features	\$800,000
Total	\$800,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The FEIS was filed with EPA on 17 January 1989 and the SEIS with EPA on 20 October 1995 (Note: the SEIS addresses changes to other project elements. No changes have occurred to the Preservation element).

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1998. The Preservation of Natural Floodplain Storage has been determined to be a separable element of the overall Passaic River Flood Damage Reduction Project which can be implemented without adverse impact anywhere in the basin.



APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Ramapo and Mahwah Rivers, Mahwah, New Jersey and Suffern, New York (Continuing)

LOCATION: The project area, which is approximately 23 miles northwest of New York City, is located near the center of the Ramapo River drainage basin along the Ramapo and Mahwah Rivers in the Township of Mahwah, Bergen County, New Jersey and the Village of Suffern, Rockland County, New York.

DESCRIPTION: The recommended project as authorized includes channel modification to the Ramapo River, Mahwah River, and Masonicus Brook. The modifications would include the widening and deepening of the channels, sheet pile walls, and bridge modifications.

AUTHORIZATION: Water Resources Development Act of 1986, Section 401

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 to 1 at 8 5/8 percent

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 8 5/8 percent

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 8 5/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Benefits and costs are from the General Design Memorandum approved August 1987 at October 1986 price levels.

Division: North Atlantic

District: New York

Ramapo and Mahwah Rivers, Mahwah, New Jersey  
and Suffern, New York

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$9,600,000		Channel Modification	0	August 2007
Estimated Non-Federal Cost	2,900,000		Entire Project	0	August 2007
Cash Contributions	\$ 644,000				
Other Costs	2,256,000				

Total Estimated Project Cost	12,500,000
------------------------------	------------

		PHYSICAL DATA
Allocations to 30 September 2001	959,500	Channel modifications
Conference Allowance for FY 2002	100,000	Ramapo River - 6,640 feet
Allocation for FY 2002	84,000 <u>1/</u>	Mahwah River - 5,660 feet
Allocation through FY 2002	1,043,500 11	Masonicus Brook - 680 feet
Allocation Requested for FY 2003	500,000 16	
		Modify Route 17 bridge over Ramapo River
Programmed Balance to Complete		
After FY 2003	8,056,500	
Unprogrammed Balance to Complete		
After FY 2003	0	

1/ Reflects \$16,000 reduction assigned for savings and slippage.

JUSTIFICATION: Flooding in the Mahwah/Suffern area affects a wide range of land, varying from small segments of open undeveloped land to highly urbanized areas. As a result, flood damage is incurred due to physical damage to property and loss of commercial, industrial and public activity. There are also significant adverse effects on the environmental quality of the area due to this frequent flooding. Historically, the Mahwah/Suffern area has experienced chronic flooding, with recent floods occurring in 1968, 1971, 1973, 1977, 1979, 1980, 1983, 1984 and Sept 1999. The most damaging flood of record was the 8 November 1977 flood, which has return interval of approximately 40 years. Recurrence of this flood would result in damages in excess of \$4,300,000 (October 1986 price levels).

FISCAL YEAR 2003: The requested amount will be applied as follows:

Planning, Engineering, and Design	\$500,000
Total	\$500,000

Division: North Atlantic

District: New York

Ramapo and Mahwah Rivers, Mahwah, New Jersey  
and Suffern, New York



NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Annual Payments During Construction and Reimbursements	Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation:		
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	\$2,256,000	
Pay 25 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103 (m) of the Water Resources Development Act of 1986 to reflect the non-Federal sponsors ability to pay, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities	\$644,000	\$ 18,000
Total non-Federal Costs	\$2,900,000	\$ 18,000

STATUS OF LOCAL COOPERATION: The non-Federal sponsors are: (1) The State of New York, through its Department of Environmental Conservation, and (2) the State of New Jersey, through its Department of Environmental Protection. By letter dated 17 March 2000 NJDEP, and letter dated 10 July 2000 NYDEP, indicated their support for the project. The Project Cooperation Agreement will be executed by August 2002.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$9,600,000 is an increase of \$1,200,000 from the latest estimate (\$8,400,000) presented to Congress (FY 2002). This change includes the following items:

ITEM	AMOUNT
Price Escalation on Construction Features	\$ 1,200,000
Total	\$ 1,200,000

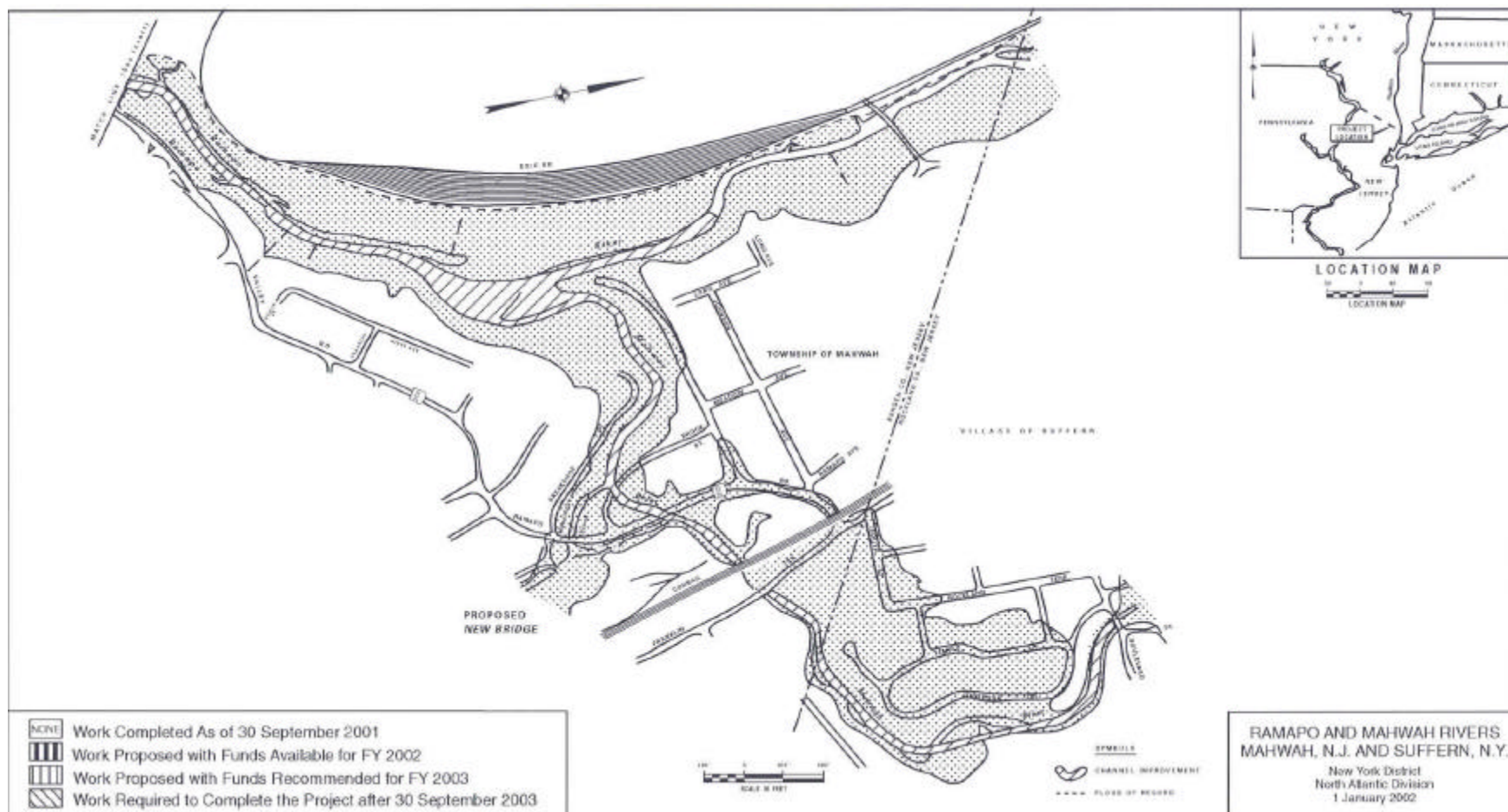
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final EIS for the project was filed with EPA on July 13, 1984.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1985. Funds to initiate construction were appropriated in FY 1990. Construction of this project was never initiated due to lack of willing local sponsors.

Division: North Atlantic

District: New York

Ramapo and Mahwah Rivers, Mahwah, New Jersey  
and Suffern, New York



APPROPRIATION TITLE: Construction General - Local Protection (Flood Control)

PROJECT: Ramapo River at Oakland, New Jersey (Continuing)

LOCATION: The project is located on the Ramapo River in the Borough of Oakland in Bergen County, and Wayne Township and the Borough of Pompton Lakes in Passaic County, New Jersey. The project extends from the Pompton Lake Dam upstream to West Oakland Avenue in Oakland.

DESCRIPTION: The plan of improvement has two major features. The first involves the installation of flood control taintor gates on the existing Pompton Lake Dam. The second feature involves channel modification consisting of widening and deepening 5,800 feet of the Ramapo River. Mitigation for environmental impacts is also included in the form of wetland creation. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986 and section 301(a)(9) of the Water Resources Development Act of 1996

REMAINING BENEFIT-REMAINING COST RATIO: 1.4 to 1 at 7 3/8 percent.

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 7 3/8 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 7 3/8 percent (FY 1995).

BASIS OF BENEFIT-COST RATIO: Benefits and costs are from the General Design Memorandum approved July 1994 at October 1993 price levels and updated in FY 1998.

Division: North Atlantic

District: New York

Ramapo River at Oakland, New Jersey

SUMMARIZED FINANCIAL DATA	ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$16,100,000	Channels & Canals	90	Aug 2002
Estimated Non-Federal Cost	1,900,000	Flood Diversion		
Cash Contributions \$ 1,000,000		Structure	0	Sep 2003
Other Costs 900,000		Entire Project	40	Sep 2003
Total Estimated Project Cost	18,000,000			
Allocations to 30 September 2001	6,701,000			
Conference Allowance for FY 2002	4,949,000			
Allocation for FY 2002	4,158,000 <u>1/</u>			
Allocation through FY 2002	10,859,000	67		
Allocation Requested for FY 2003	5,241,000	100		
Programmed Balance to Complete				
After FY 2002	0			
Unprogrammed Balance to Complete				
After FY 2003	0			

#### PHYSICAL DATA

Channels & Canals: 5800 feet of channel modification along the Ramapo River  
Flood Diversion Structure: Installation of taintor gates at the Pompton Lake Dam.

1/ Reflects \$791,000 reduction for savings and slippage.

JUSTIFICATION: The project area suffers annual flood damages of \$1,100,000 (Oct 1995 price level) without the project. Damages of \$200,000 would occur with the project in place. The level of protection is the 40-year flood. The project would also provide protection against larger flood events. The maximum flood of record was the April 1984 flood; an approximate 40-year event, which resulted in residential damages of \$3,500,000, in 1984. This flood would cause damages estimated at \$5,200,000 if it occurred today (Oct 1995 price level). Approximately 300 families were evacuated during the 1984 flood and 20 people were trapped and had to be rescued. Flooding also caused traffic disruption causing many businesses to close. Damaging floods have occurred 11 times in the past 20 years with the most recent floods in 1983, 1984, 1987, and 1993. The project does not support the development of the floodplain directly or indirectly. The project does avoid, where possible, both long and short term environmental impacts. Mitigation includes the construction of 5.0 acres of wetlands in the project area. Average annual benefits, all flood control, are estimated at \$1,148,000 at October 1998 price levels.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Complete Flood Diversion Structure	4,549,000
Planning, Engineering and Design	100,000
Construction Management	\$ 300,000
Total	\$ 5,241,000

Division: North Atlantic

District: New York

Ramapo River at Oakland, New Jersey

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Annual Payments During Construction and Reimbursements	Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation:		
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	\$ 1,000,000	
Pay 25 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103 (m) of the Water Resources Development Act of 1986 to reflect the non-Federal sponsors ability to pay, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities. Credits as per WRDA 1990/92 will reduce Non-Federal cash share by \$ 1,855,000 from \$2,515,000 to \$60,000.	\$ 900,000	\$ 65,000
Total non-Federal Costs	\$ 1,900,000	\$65,000

REQUIREMENTS OF LOCAL COOPERATION: Provide lands, easements, right of way, and borrow any excavated or dredged material disposal area; Pay 25 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103 WRDA (m) of the Water Resources Development Act of 1986 to reflect the non-Federal sponsors ability to pay, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.

STATUS OF LOCAL COOPERATION: The State of New Jersey, through its Department of Environmental Protection (NJDEP), is the non-Federal sponsor. By letter dated 22 October 1993, NJDEP indicated its commitment to the project. Funds to cover the entire non-Federal share of the project cost have been programmed into the New Jersey State Capital Budget for FY 1995 and FY 1996. The funds will be held in escrow and expended each year as required. NJDEP understands their responsibilities in carrying out the provisions of the PCA and is prepared to enter into such an agreement as documented in their letter of 4 January 1994. The project is also supported by the Borough of Oakland. Oakland has purchased portions of the real estate necessary for the project. The real estate will be turned over to the State of New Jersey, the non-Federal sponsor, as a share in the project cost. The PCA was executed in April 1999.

Division: North Atlantic

District: New York

Ramapo River at Oakland, New Jersey

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$16,100,000 is an increase of \$4,300,000 over the latest estimate (\$11,800,000) presented to Congress (FY 2002). This change includes the following items:

ITEM	AMOUNT
Price Escalation on Construction Features	\$ 420,000
Other estimating adjustments	3,880,000
Total	\$ 4,300,000

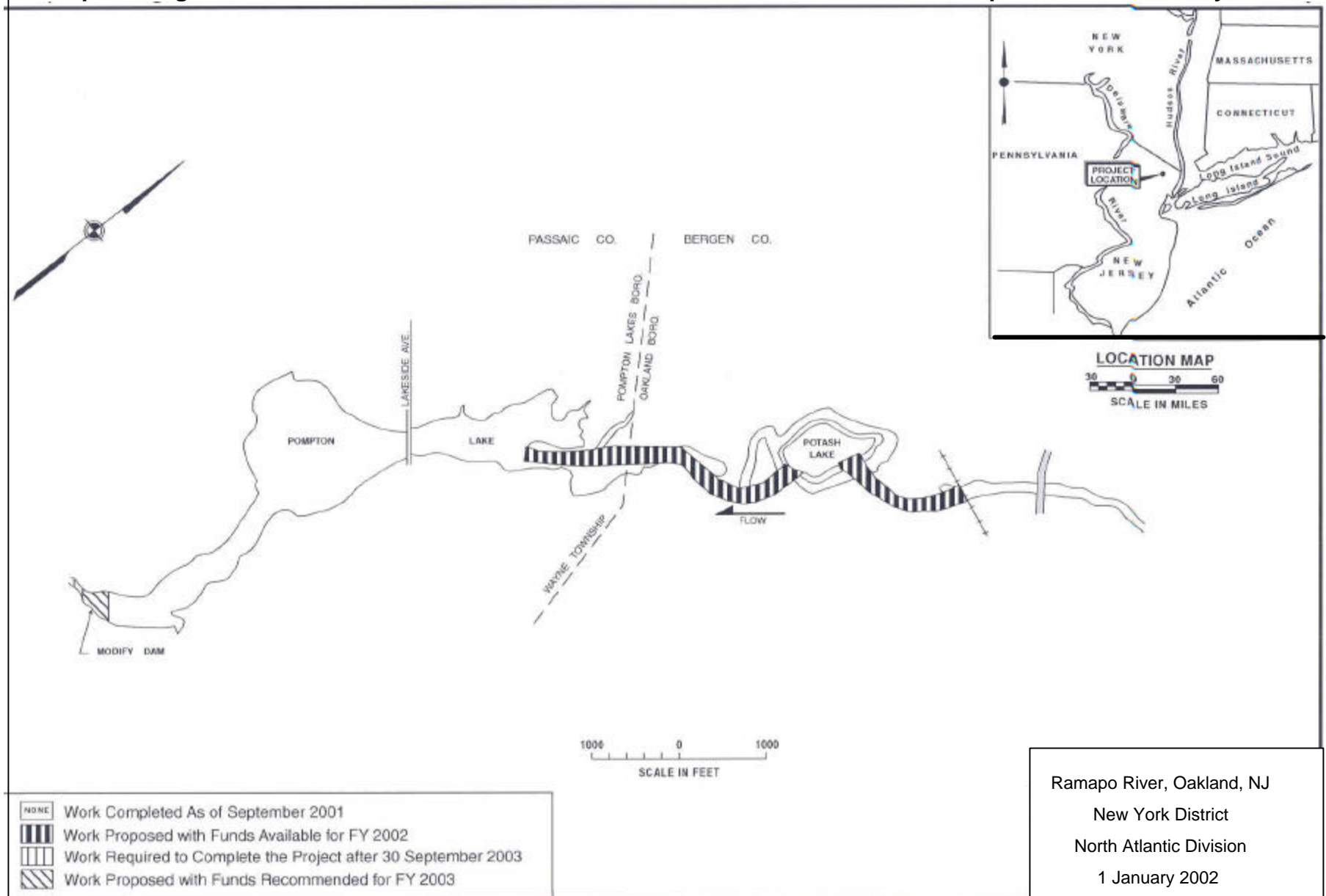
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with the EPA ON 21 June 1985.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1995. The project cost includes \$220,000 for fish and wildlife mitigation and \$105,000 for cultural resources preservation.

Division: North Atlantic

District: New York

Ramapo River at Oakland, New Jersey



APPROPRIATION TITLE: Construction, General - Flood Control

PROJECT: Raritan River Basin, Green Brook Sub-Basin, New Jersey (Continuing)

LOCATION: The Green Brook Sub-Basin project area is located within the Raritan River Basin in north-central New Jersey in Middlesex, Somerset and Union Counties. It drains approximately 65 square miles of primarily urban and industrialized area. It includes the following communities: Dunellen, Middlesex Borough, Piscataway, South Plainfield, Bound Brook, Bridgewater, Green Brook, North Plainfield, Warren, Watchung, Berkeley Heights, Plainfield, and Scotch Plains. The project area is divided into three sub-areas: the lower, upper and Stony Brook portions of the sub-basin.

DESCRIPTION: The NED plan consists of a system of levees and floodwalls in the lower portion of the basin, channel modifications and dry detention basins in the upper portion of the basin, and channel modifications in the Stony Brook portion of the sub-basin. The recommended plan consists of levees and floodwalls in the lower portion of the basin and channel modifications in the Stony Brook portion of the sub-basin. The upper portion of the sub-basin has been deferred.

AUTHORIZATION: Water Development Act of 1986.

REMAINING BENEFITS-REMAINING COST RATIO: 1.3 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 7 5/8 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 7 5/8 percent (FY 1998).

BASIS OF BENEFIT-COST RATIO: Benefits are from the analysis contained in the Final General Reevaluation Report dated May 1997 at April 1996 price levels.

Division: North Atlantic

District: New York

Raritan River Basin, Green Brook Sub-Basin, NJ



SUMMARIZED FINANCIAL DATA:			ACCUM.	PCT. OF EST.	STATUS	PERCENT	PHYSICAL
			FED. COST	(1 Jan 2002)	COMPLETE	SCHEDULE	
Estimated Federal Cost determined		319,500,000		Element 1	0	Sept 2005	
Programmed Construction	274,800,000			Element 2,5	0	Indefinite	
Unprogrammed Construction determined	44,700,000			Elements 3,4,6,7	0	Sept 2011	
Estimated Non-Federal Cost		107,500,000		Entire Project	0	Indefinite	
Programmed Construction	91,600,000						
Cash Contributions	26,500,000						
Other Costs	65,100,000						
Unprogrammed Construction	15,900,000						
Total Estimated Programmed Construction Cost		366,400,000					
Total Estimated Unprogrammed Construction Cost		60,600,000					
Total Estimated Project Cost		427,000,000					
Allocations to 30 September 2001		33,924,000					
Conference Allowance for FY 2002		10,000,000					
Allocation for FY 2002		7,402,000	1/				
Allocations through FY 2002		41,326,000	13				
Allocation Requested for 2003		5,000,000	14				
Programmed Balance to complete after FY 2003		228,474,000					
Unprogrammed Balance to complete after FY 2002		44,700,000					

1/ Reflects \$1,598,000 reduction for savings and slippage and \$1,000,000 from the project.

JUSTIFICATION: The project area suffers annual flood damages of \$41,000,000 (Apr 96 P.L.) without the project. On August 28, 1971 Hurricane Doria caused \$85,200,000 in damages (Oct 95 P.L.). Another major storm occurred on August 2, 1973 which caused \$89,300,000 in damages (Oct 95 P.L.). Flooding was so extensive that the area was designated a Major Disaster Area. Six deaths were attributed to this storm, thirty four people were injured and there were more than 1,000 people evacuated from their residences.

FISCAL YEAR 2003: The requested amount will be applied as follows:		
Continue Construction of 1st Construction Element		\$ 3,500,000
Planning, Engineering, and Design		1,000,000
Construction Management		500,000
Total		\$ 5,000,000

Division: North Atlantic

District: New York

Raritan River Basin, Green Brook Sub-Basin,

NJ

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, relocations and borrow excavated or dredged material disposal areas.	\$ 65,100,000	
Pay 25 percent of cost associated with non-structural flood protection.	(programmed work) 12,700,000 (unprogrammed work) 3,200,000	
Pay 6 percent of the costs allocated to flood control, to bring the total non-Federal share of flood control costs to 25 percent as determined under Section 103 (m) of the Water Resources Development Act of 1986, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	(programmed) 23,500,000 (unprogrammed) 3,000,000	\$1,157,000
Total Non-Federal Costs	\$107,500,000	\$1,157,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The State of New Jersey Department of Environmental Protection, provided a letter dated 17 April 1997 stating their support and endorsement of the project. Governor Whitman also provided a letter of support on 26 February 1998. The Green Brook Flood Control Commission has stated their strong support for the project in a letter dated 4 October 1995. Also, several counties and municipalities have adopted resolutions endorsing and supporting the project. The Project Cooperation Agreement was executed in June 1999.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$319,500,000 is an increase of \$5,100,000 from the latest estimate (\$314,400,000) presented to Congress (FY 2002). This change includes the following items:

Price Escalation on Construction Features	\$5,100,000
Total	\$5,100,000

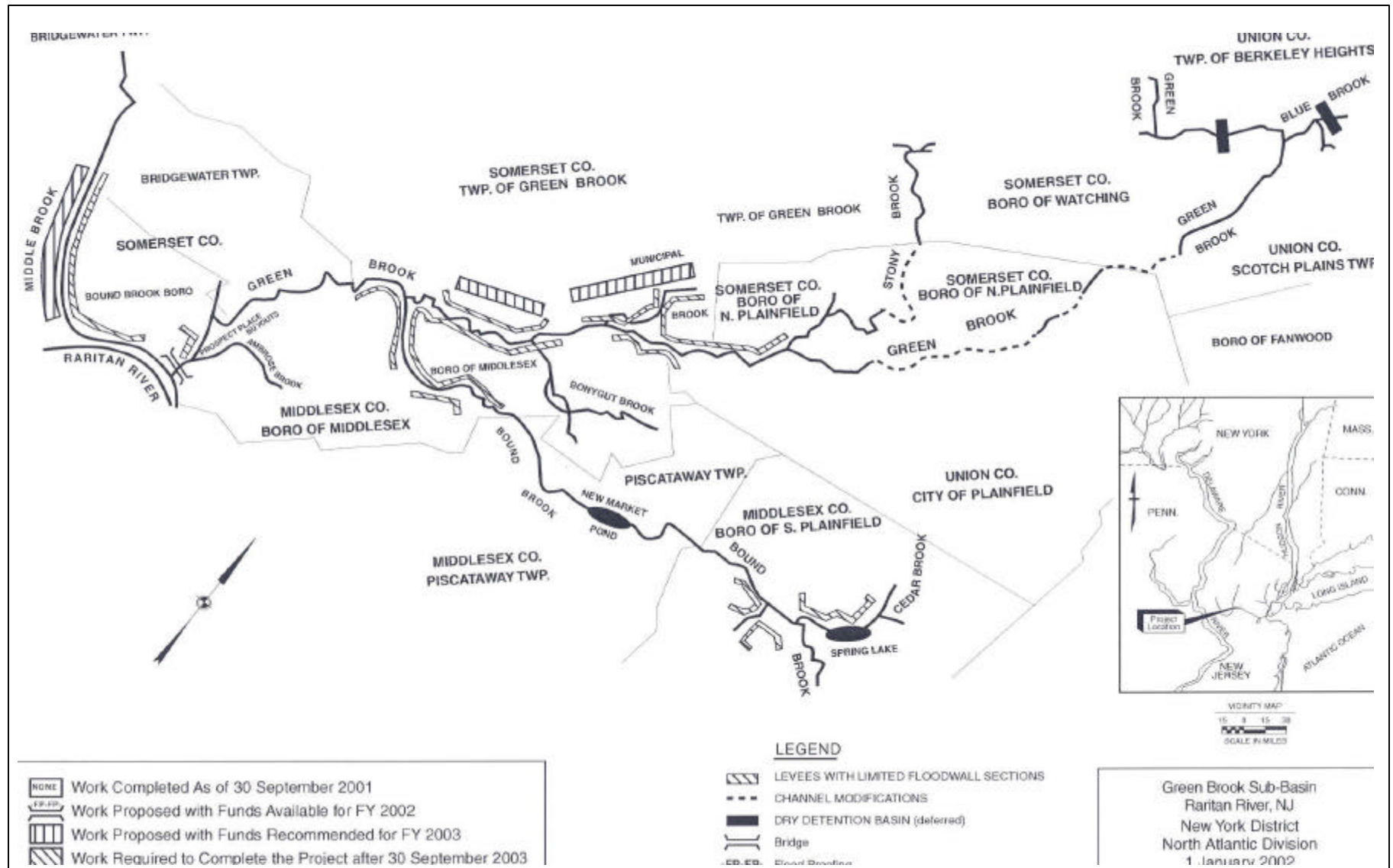
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed in August 1980. A Supplemental Environmental Impact Statement with the Final General Reevaluation Report was released in May 1997 and the Record of Decision was issued in July 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986 and funds to initiate construction were appropriated in FY 1998.

Division: North Atlantic

District: New York

Raritan River Basin, Green Brook Sub-Basin, NJ



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Lackawanna River, Olyphant, Pennsylvania (Continuing)

LOCATION: Olyphant, Pennsylvania, is located along the Lackawanna River in the northeastern portion of the Commonwealth of Pennsylvania, in Lackawanna County.

DESCRIPTION: The proposed flood control system will provide a 100-year level of protection for the Borough. The project consists of levees, floodwalls, a closure structure, and interior drainage facilities. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1992.

REMAINING BENEFIT - REMAINING COST RATIO: 12.6 to 1 at 8% percent.

TOTAL BENEFIT - COST RATIO: 1.7 to 1 at 8% percent.

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 8% percent (FY 1995).

BASIS OF BENEFIT - COST RATIO: Benefits are from the final Design Memorandum approved in January 1997 at October 1995 price levels.

SUMMARIZED FINANCIAL DATA

	ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 02)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$12,000,000			
Estimated Non-Federal Cost:	5,500,000	Entire Project	0	Nov 2003
Cash Contributions	\$ 875,000			
Other Costs	4,625,000			
Total Estimated Project Cost	\$17,500,000			

PHYSICAL DATA

Allocations to 30 September 2001	10,839,000		Earth levees	- 3,800 feet
Conference Allowance for FY 2002	0		Concrete floodwall	- 1,400 feet
Allocation for FY 2002	0		Drainage Control	
Allocations through FY 2002	10,839,000	90	structures	- 7
Allocation Requested for FY 2003	1,161,000	100	Gabion slope	
Programmed Balance to Complete			protection	- 1,500 feet
after FY 2003	0			
Unprogrammed Balance to Complete				
after FY 2003	0			

Division: North Atlantic

District: Baltimore

Lackawanna River, Olyphant, PA

JUSTIFICATION: Major floods occurred in the Lackawanna River Basin in 1942, 1955, 1985, and most recently in January 1996. While the damage from these floods was widespread in the Lackawanna Basin, including many small communities and rural developments, the largest and most concentrated damages occurred in urbanized areas, including the City of Scranton and the Borough of Olyphant. The January 1996 flood is estimated to have caused \$15-20 million in damages at Olyphant (October 1997 price level). The Olyphant community comprises a part of the Scranton Metropolitan Area and is important in the commerce and culture of the region. The 1996 flood caused serious property damage to homes and businesses, and untold trauma and hardship to local residents. Flood protection is desired to maintain homes and businesses free from flood damage and promote community improvement. The recommended plan is the national Economic Development Plan that maximizes net economic benefits. It will prevent about 84 percent of the existing \$1.44 million in average annual commercial, industrial and residential flood damages estimated to occur in the protected area. Estimated average annual benefits, all flood control, are \$2,193,000, based on the final Design Memorandum approved in January 1997 at October 1995 price levels.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Complete Levee Construction	\$1,100,000
Planning, Engineering, and Design	\$ 11,000
Construction Management	\$ 50,000
Total	\$1,161,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Requirements of Local Cooperation		
Prepare a flood plain management plan design to reduce the impacts of future flood events in the project area.		
Provide lands, easements, and rights of way.	\$3,619,000	
Modify or relocate, utilities, roads, bridges(except railroad bridges) and other facilities where necessary in the construction of the project.	961,000	
Pay 5 percent of the cost allocated to flood control and bear all costs of operation, maintenance, and replacement of flood control facilities.	875,000	\$60,000
Total Non-Federal Costs	\$5,500,000	\$60,000

Division: North Atlantic

District: Baltimore

Lackawanna River, Olyphant, PA

STATUS OF LOCAL COOPERATION: The local sponsor for the Olyphant local flood control project is the Borough of Olyphant. The Commonwealth of Pennsylvania has entered into a subagreement with the Borough that it will contribute 50% of the non-Federal share. The final Project Cooperation Agreement was executed in August 1998. To date, the sponsor has fully complied with the local requirements on the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$12,000,000 is an increase of \$2,200,000 from the latest estimate (\$9,800,000) submitted to Congress (FY 1999). This change includes the following item:

ITEM	AMOUNT
Price Escalation on Construction Features	\$ 560,000
Other Estimating Adjustments	1,640,000
TOTAL	\$2,200,000

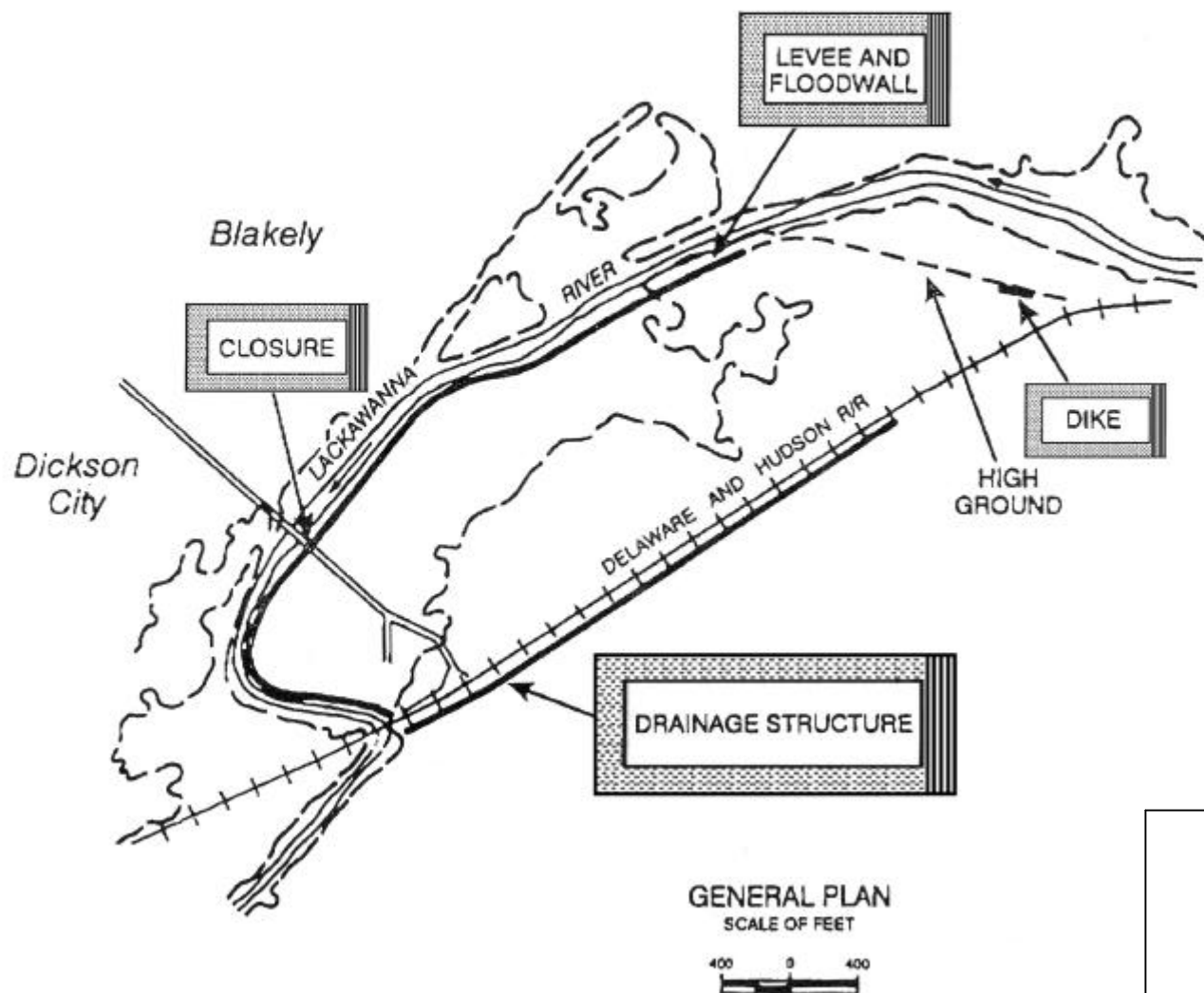
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with EPA in April 1992. An Environmental Assessment (EA) including Finding of No Significant Impact was included in the final Design Memorandum for the first construction element (dike), approved in July 1994. An EA for the second construction element (levee/floodwall) was included in the final Design Memorandum for the second construction element, released in January 1997. This second EA with a Finding of No Significant Impact was approved in April 1997.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1992, and funds to initiate construction were appropriated in FY 1995.

Division: North Atlantic

District: Baltimore

Lackawanna River, Olyphant, PA



VICINITY MAP  
NOT TO SCALE



#### LEGEND

- FLOOD LINE FOR FLOOD OF RECORD MAY 1942.
- None WORK COMPLETED AS OF 30 SEPTEMBER 2001
- WORK PROPOSED WITH FUNDS AVAILABLE FOR FY. 2002
- WORK PROPOSED WITH FUNDS RECOMMENDED FOR F.Y. 2003
- None WORK REQUIRED TO COMPLETE THE PROJECT AFTER F.Y. 2003

## LACKAWANNA RIVER, OLYPHANT, PENNSYLVANIA

1 JANUARY 2002

BALTIMORE DISTRICT

NORTH ATLANTIC DIVISION

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Wyoming Valley, Pennsylvania (Levee Raising) (Continuing)

LOCATION: Wyoming Valley is located in northeastern Pennsylvania and extends from Duryea on the Lackawanna River southwestward to Nanticoke on the Susquehanna River. The Wyoming Valley flood control projects are located on the Susquehanna River in Luzerne County and are the four contiguous existing Federal flood control projects at Plymouth, Kingston-Edwardsville, Swoyersville-Forty Fort, and Wilkes-Barre and Hanover Township, which together function as a flood control system within the Valley.

DESCRIPTION: The four existing Federal flood control projects in the Wyoming Valley were designed to protect against a flood equal to the March 1936 event which had a peak flow of 232,000 cubic feet per second. Modifications to the existing project would protect against flood flows of 318,500 cubic feet per second that would be caused by a recurrence of Storm Agnes. The proposed modifications include raising existing levees and floodwalls between 3 and 5 feet, modifying closure structures, relocating utilities, and providing some new floodwalls and levees to maintain the integrity of the flood control system. The proposed project also includes a plan to reduce project-related adverse impacts. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986 and the Water Resources Development of 1996.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable because project construction is substantially complete.

TOTAL BENEFIT - COST RATIO: Not applicable because project construction is substantially complete.

INITIAL BENEFIT - COST RATIO: 2.8 to 1 at 8 1/4 percent (FY 1995).

BASIS OF BENEFIT - COST RATIO: Benefits are from the final Phase II General Design Memorandum approved February 1996 at January 1993 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$131,000,000				
Estimated Non-Federal Cost:	44,000,000		Levee Raising	65	Sep 2003
Cash Contributions	\$33,538,000		Entire Project	50	Sep 2006
Other Costs	10,462,000				
Total Estimated Project Cost	\$175,000,000				

Division: North Atlantic

District: Baltimore

Wyoming Valley, PA (Levee Raising)



SUMMARIZED FINANCIAL DATA: (CONT'D)

Allocations to 30 September 2001	67,793,000	
Conference Allowance for FY 2002	19,000,000	
Allocation for FY 2002	14,992,000	<u>1/</u>
Allocations through FY 2002	82,785,000	63
Allocation Requested for FY 2003	9,439,000	71
Programmed Balance to after FY 2003	38,776,000	
Unprogrammed Balance to Complete after FY 2003	0	

1/ Reflects \$3,037,000 reduction assigned as savings and slippage and \$971,000 reprogrammed from the project.

PHYSICAL DATA

<u>Swoyersville-Forty Fort</u>		<u>Plymouth</u>	
<u>Completed Work</u>	<u>Raising Work</u>	<u>Completed Work</u>	<u>Raising Work</u>
<u>Levees</u> - Earthfill: 16,970 ft.	<u>Levees</u> - Earthfill: 16,500 ft. x 3-5 ft.	<u>Levees</u> - Earthfill: 8,700 ft.	<u>Levees</u> - 8,600 ft. x 2-4 ft.
<u>Floodwall</u> - Steel sheetpile: 2,490 ft.	<u>Floodwall</u> - Steel sheetpile: 4,000 ft. x 3-5 ft.	<u>Channel</u> - 2,670 ft.	<u>Floodwall</u> - Concrete: 200 ft. x 2-4 ft.
<u>Channel</u> - 3,900 ft.		<u>Pump Stations</u> - 2	Steel sheetpile: 200 ft. x 2-4 ft.
			Earth: 500 ft. x 2-4 ft.
			<u>Pump Station Modification</u> - 2

<u>Kingston-Edwardsville</u>		<u>Wilkes-Barre and Hanover Township</u>	
<u>Completed Work</u>	<u>Raising Work</u>	<u>Completed Work</u>	<u>Raising Work</u>
<u>Levees</u> - Earthfill: 18,430 ft.	<u>Levees</u> - Earthfill: 17,300 ft. x 3-5 ft.	<u>Levees</u> - Earthfill: 27,860 ft.	<u>Levees</u> - Earthfill: 20,600 ft. x 3-5 ft.
<u>Conduit</u> - 16.5 ft. x 6,660 ft.	<u>Floodwall</u> - Concrete: 500 ft. x 3-5 ft. Earth:	<u>Floodwall</u> - Concrete: 160 ft.	<u>Floodwall</u> - Concrete: 500 ft. x 3-5 ft. Sheetpile 4,300 ft.
<u>Channel</u> - 3,640 ft.	500 ft. x 3-5 ft.	<u>Pump Stations</u> - 5 stormwater 8 sanitary	x 3-5 ft. Earth: 600 ft.
<u>Pump Stations</u> - 3	<u>Closures</u> - 3 new	<u>Channel</u> - 1,000 ft.	x 3-5 ft.
	<u>Pump Station Modifications</u> - 3		<u>Closures</u> - 3 new & 1 modified
			<u>Pump Station Modification</u> - 13

Division: North Atlantic

District: Baltimore

Wyoming Valley, PA (Levee Raising)

JUSTIFICATION: The four existing local protection projects which comprise the Wyoming Valley system were constructed between 1935 and 1976 and provide protection for an area of 5,160 acres and a population of 225,000. Over the past 200 years at least 32 floods have been recorded which exceeded a stage of 25 feet at Wilkes-Barre compared to the flood stage of 22 feet. The discharge of 345,000 cubic feet per second during June 1972 (Storm Agnes) without the now completed Cowanesque and Tioga-Hammond Lakes projects in operation overtopped the protection and resulted in the greatest flood of record with damages of \$730,000,000. A recurrence of Storm Agnes would result in damages to about 25,000 structures with an estimated value of about \$4 billion (October 1997 price level). In January 1996, a combination of rainfall and snowmelt resulted in a flood stage of about 34 feet at Wilkes-Barre, PA. Although the existing system prevented flood damages of nearly \$500 million, residual damages were estimated at about \$6 million in the Wyoming Valley area. The average annual benefits amount to \$27,143,000 essentially all for flood control, based on the final Phase II General Design Memorandum approved February 1996 at January 1993 price levels.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Complete construction of Wilkes Barre-Hanover Township levee	\$1,300,000
Complete Construction of Stormwater Pump Stations	7,500,000
Continue Non-Structural Mitigation Measures	50,000
Planning, Engineering and Design	100,000
Construction Management	489,000
Total	\$ 9,439,000

Division: North Atlantic

District: Baltimore

Wyoming Valley, PA (Levee Raising)

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, and rights of way.	4,272,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges) and other facilities where necessary in the construction of the project.	6,190,000	
Pay 18 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance and replacement of flood control facilities.	31,735,000	166,000
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	1,803,000	37,000
Total Non-Federal Costs	\$44,000,000	\$203,000

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the Luzerne County Flood Protection Authority. The Pennsylvania Department of Environmental Protection has committed to provide 45 percent of the non-Federal share of project costs. Letters of intent to provide the required local cooperation requirements were furnished by Luzerne County (19 January 1995) and the Commonwealth of Pennsylvania (30 December 1994). A Project Cooperation Agreement was executed in October 1996. To date, the County has fully complied with the local requirements on the project.

Division: North Atlantic

District: Baltimore

Wyoming Valley, PA (Levee Raising)

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$131,000,000 is the same as the latest estimate (\$131,000,000) presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Supplemental Environmental Impact Statement is included in the final General Design Memorandum approved February 1996. The Record of Decision was signed 24 June 1996.






OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1984, and funds to initiate construction were appropriated in FY 1995.

Division: North Atlantic

District: Baltimore

Wyoming Valley, PA (Levee Raising)

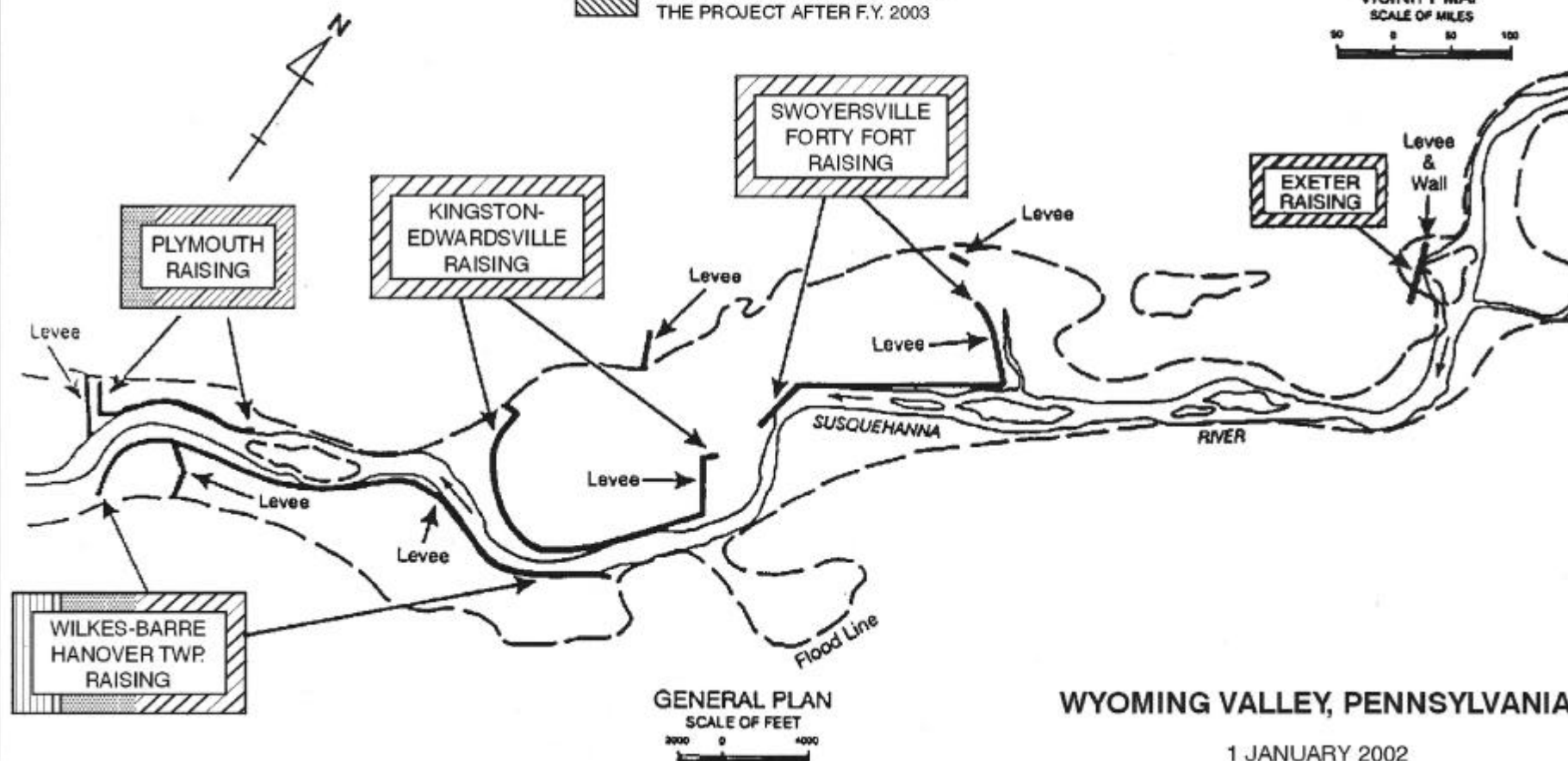
# LEGEND

-  FLOOD LINE FOR FLOOD OF RECORD JUNE 1972
-  WORK COMPLETED AS OF 30 SEPTEMBER 2001
-  WORK PROPOSED WITH FUNDS AVAILABLE FOR F.Y. 2002
-  WORK PROPOSED WITH FUNDS RECOMMENDED FOR F.Y. 2003
-  WORK REQUIRED TO COMPLETE THE PROJECT AFTER F.Y. 2003



VICINITY MAP  
SCALE OF MILES

0 50 100



## WYOMING VALLEY, PENNSYLVANIA

1 JANUARY 2002

BALTIMORE DISTRICT NORTH ATLANTIC DIVISION

APPROPRIATION TITLE: Construction, General - Environmental Restoration

PROJECT: Chesapeake Bay Oyster Recovery, Maryland & Virginia (Continuing)

LOCATION: The Chesapeake Bay in Maryland & Virginia

DESCRIPTION: The project will contribute to multi-agency and private efforts to restore oyster populations in the Chesapeake Bay. Project elements include: construction or rehabilitation of oyster reefs to create sanctuary and harvestable oyster habitats; construction of hatchery and seed bar facilities for production and collection of disease-free oyster seed or "spat"; planting spat and brood-stock oysters in locations which best foster oyster reproduction and health; and monitoring the performance of the project to increase oyster populations.

AUTHORIZATION: Water Resources Development Act of 1986, as amended by Section 505 of WRDA '96 and Section 342 of WRDA '00.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA		ACCUM PCT. OF EST. FED COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	20,000,000				
Estimated Non-Federal Cost:	6,667,000		Entire Project	25	Sep 2007
Cash Contributions	\$ 0				
Other Costs	\$6,667,000				
Total Estimated Project Cost	\$26,667,000				

Division: North Atlantic

District: Baltimore

Chesapeake Bay Oyster Recovery, MD and VA

SUMMARIZED FINANCIAL DATA: (CONT'D)

Allocations to 30 September 2001	5,020,000	
Conference Allowance for FY 2002	3,000,000	
Allocation for FY 2002	2,521,000	<u>1/</u>
Allocations through FY 2002	7,541,000	38
Allocation Requested for FY 2003	2,000,000	48
Programmed Balance to Complete after FY 2003	10,459,000	
Unprogrammed Balance to Complete after FY 2003	0	

PHYSICAL DATA

New oyster bars constructed	2000 acres
Existing oyster bars rehabilitated	135 acres
Oyster seed production	
Hatchery Spat transplanted	- 41 million
Seed bars created	- 27 million
Natural Spat transplanted	- 58,000 Bushels

1/ Reflects \$479,000 reduction assigned for savings and slippage.

JUSTIFICATION: The Chesapeake Bay oyster population has declined dramatically since the turn of the century, largely due to the parasitic diseases, MSX, Dermo, and overharvesting. These diseases kill oysters before they reach maturity and marketable size. As a result, there has been a collapse in the oyster industry, with the 1995 harvest equating to less than one percent of the harvest 100 years ago. More significantly, the reduced oyster population has adversely impacted water quality in the Bay, due to the smaller size and numbers of oyster beds to filter and clean the water. Activities to restore physical oyster habitat and maintain water quality are critical to the economic and environmental survival of the Chesapeake Bay. Restoration of oyster populations in the bay is a high priority of the State of Maryland, the Commonwealth of Virginia, and the Chesapeake Bay Program. Currently, there is a Chesapeake Bay goal to increase oyster habitat 10-fold by 2010. The project will help implement recommendations in the June 1999 scientific consensus document on Chesapeake Bay oyster restoration which fall within the Corps' environmental restoration mission. As part of this project, the Corps will develop a long-term master plan to document the Corps' role in these recommendations.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Fish and Wildlife Facilities:	
Maryland	960,000
Virginia	670,000
Planning, Engineering, and Design:	
Maryland	120,000
Virginia	130,000
Construction Management:	
Maryland	60,000
Virginia	60,000
Total	2,000,000

Division: North Atlantic

District: Baltimore

Chesapeake Bay Oyster Recovery, MD and VA

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation Maintenance and Replacement Costs
Requirements of Local Cooperation		
Pay 25 percent of the cost allocated to fish and wildlife restoration (by work-in-kind credits) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of fish and wildlife facilities.	\$6,667,000	\$0
Total Non-Federal Costs	\$6,667,000	

STATUS OF LOCAL COOPERATION: The State of Maryland and the Commonwealth of Virginia are the non-Federal project sponsors. The Project Cooperation Agreement between the Corps of Engineers and the State of Maryland was executed in February 1997. To date, the State has fully complied with the requirements of local cooperation. An amendment to this Project Cooperation Agreement is scheduled for execution in May 2002. The Project Cooperation Agreement between the Corps and the Commonwealth of Virginia was executed in September 2001.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal estimate of \$20,000,000 is the same as the latest estimate (\$20,000,000) presented to Congress (FY 2002).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment and finding of no significant impact was completed in January 1996 for the Maryland activities. A separate environmental assessment and finding of no significant impacts was prepared in spring of 2001 for the Virginia activities.

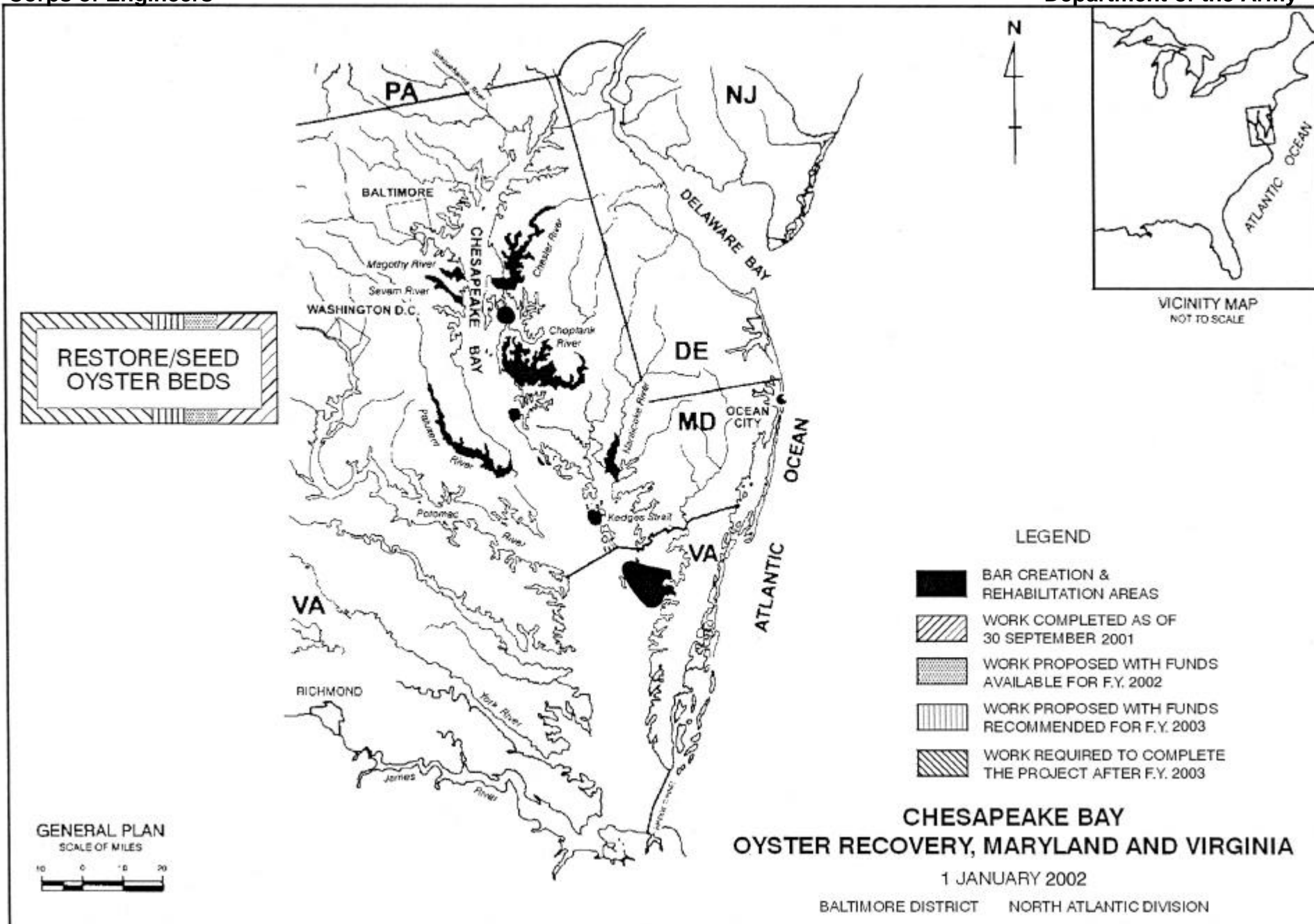
OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1995.

Division: North Atlantic

District: Baltimore

Chesapeake Bay Oyster Recovery, MD and VA





APPROPRIATION TITLE: Construction, General - Environmental Restoration

PROJECT: Poplar Island, Maryland (Continuing)

LOCATION: Poplar Island is a group of islands located in the upper middle Chesapeake Bay approximately 34 nautical miles southeast of the Port of Baltimore.

DESCRIPTION: The project consists of reconstructing Poplar Island to its approximate size in 1847 (1,140 acres), using an estimated 38 million cubic yards of uncontaminated dredged material from maintenance dredging of the southern approach channels of the Baltimore Harbor and Channels navigation project. This will be accomplished through the construction of approximately 35,000 feet of dikes to contain the dredged material necessary to form the low and high marsh wetlands and upland habitat and to protect the 1,140-acre dredged material placement area from the severe wave activity in this region of the Chesapeake Bay.

AUTHORIZATION: Water Resources Development Acts of 1996 and 2000.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA	ACCUM PCT. OF EST. FED COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	254,000,000			
Estimated Non-Federal Cost:	84,000,000	Entire Project	30	Sep 2014
Cash Contributions	83,963,000			
Other Costs	37,000			
Total Estimated Project Cost	338,000,000			

Division: North Atlantic

District: Baltimore

Poplar Island, Maryland

## SUMMARIZED FINANCIAL DATA:(CONT'D)

Allocations to 30 September 2001	87,700,000	
Conference Allowance for FY 2002	18,200,000	
Allocation for FY 2002	18,276,000	1/
Allocations through FY 2002	105,976,000	42
Allocation Requested for FY 2003	10,600,000	46
Programmed Balance to Complete after FY 2003	137,424,000	
Unprogrammed balance to Complete after FY 2003	0	

## PHYSICAL DATA

Earth dikes	35,000 feet
Wetlands created	555 acres
Uplands created	555 acres
Submerged aquatic vegetation	1,000 acres

1/ Reflects \$2,909,000 reduction assigned as savings and slippage and \$2,985,000 reprogrammed to the project.

JUSTIFICATION: Valuable island habitat at Poplar Island is being lost through erosion. Islands are preferentially selected by many fish and wildlife species as nesting/production areas. The lack of human disturbance and fewer predators make islands more productive. Poplar Island is currently eroding at more than 13 feet per year and will disappear by the turn of the century. The plan to restore the island using uncontaminated dredged material from maintenance dredging of the Baltimore Harbor and Channels navigation project has been developed through the cooperative efforts of many state and Federal agencies, as well as private organizations. The Port of Baltimore is rapidly reaching a point where available placement area capacity will be insufficient to meet the port's dredging needs. A disruption in the constant maintenance that is required to keep the Port of Baltimore operational would result in significant adverse effects to both the local and national economy.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Continue Dredging	\$10,055,000
Planning, Engineering, and Design	147,000
Construction Management	398,000
Total	\$10,600,000

Division: North Atlantic

District: Baltimore

Poplar Island, Maryland

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation Maintenance and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, and rights-of-way	\$ 37,000	
Pay 25 percent of the cost allocated to fish & wildlife restoration and bear all costs of operation, maintenance, repair, rehabilitation and replacement of fish and wildlife facilities.	83,963,000	420,000
Total Non-Federal Costs	\$84,000,000	420,000

STATUS OF LOCAL COOPERATION: The State of Maryland is the non-Federal sponsor. By letter dated 16 May 1996, the State of Maryland stated its intent to be the non-Federal sponsor and participate in project cost sharing in accordance with the Water Resources Development Act of 1986. The Project Cooperation Agreement was executed in April 1997. To date, the State has fully complied with the local requirements on the project. By letter dated 30 December 1998, the State requested that the Corps proceed with Phase 2 construction of the project by January 2000.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$254,000,000 is a decrease of \$66,000,000 from the latest estimate (\$320,000,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	-\$ 76,000,000
Other Estimating Adjustments	10,000,000
Total	-\$66,000,000

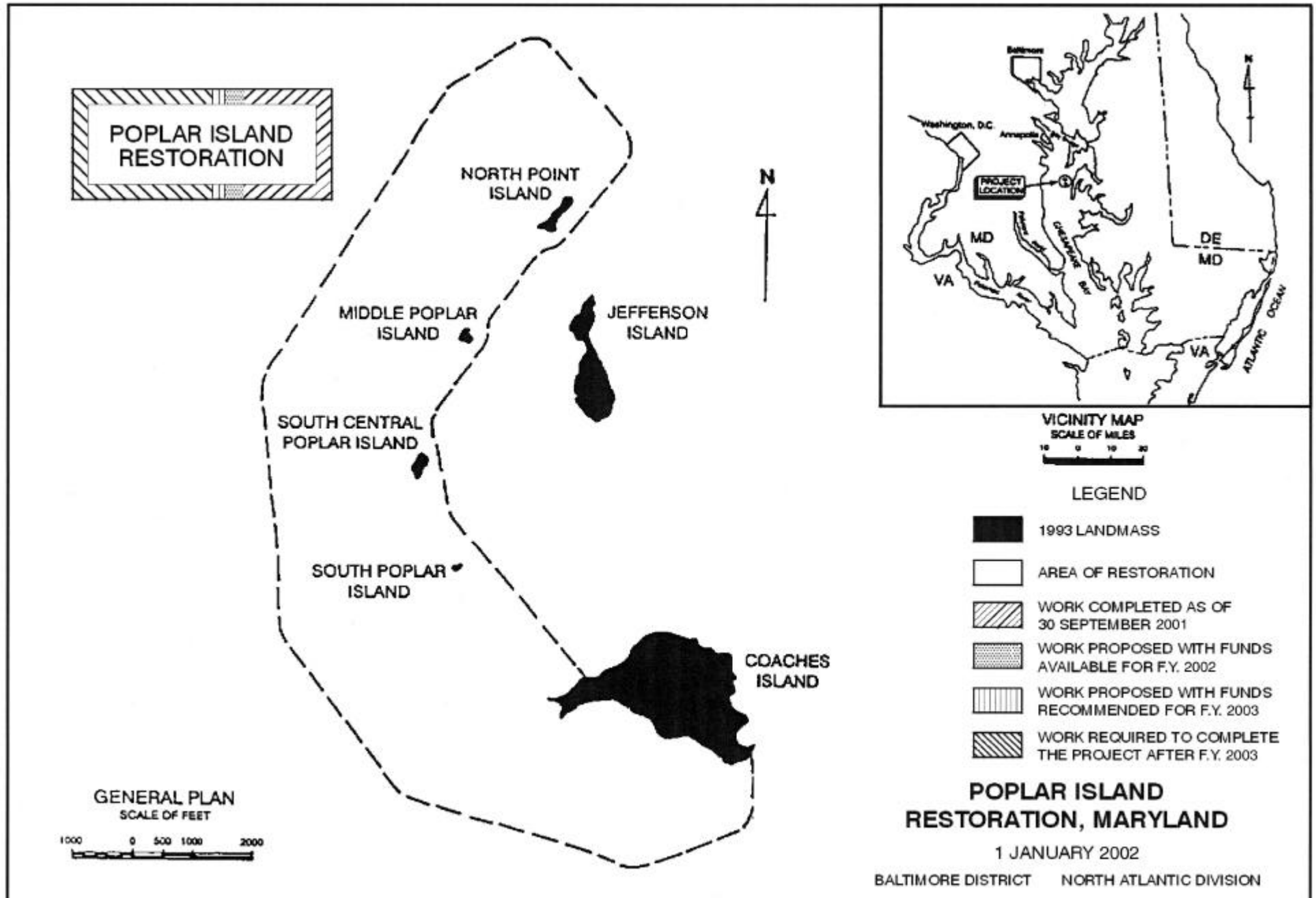
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The EIS was distributed for review and was finalized in February 1996 under the authority of Section 204 of the Water Resources Development Act of 1992.

OTHER INFORMATION: Planning for this project was accomplished under the authority of Section 204 of the Water Resources Development Act of 1992. The feasibility study was initiated in September 1994, completed in February 1996, and approved by the Assistant Secretary of the Army for Civil Works in September 1996. Funds to initiate construction were appropriated in FY 1997.

Division: North Atlantic

District: Baltimore

Poplar Island, Maryland



APPROPRIATION TITLE: Construction, General - Major Rehabilitation - Navigation

PROJECT: Cape Cod Canal Railroad Bridge, Massachusetts (Continuing)

LOCATION: The Cape Cod Canal is located about 50 miles south of Boston, Massachusetts, and extends from Cape Cod Bay 7.7 miles to Buzzards Bay. The railroad bridge is located close to the western end of the Canal near Buzzards Bay and provides rail access across the Canal.

DESCRIPTION: The bridge is 806 feet long and carries a single track on an open timber tie deck across the Cape Cod Canal. The bridge was constructed in 1935 and consists of a 550-foot moveable center span, flanked by a tower and 128-foot fixed span at each end. The bridge is normally kept in the raised position, with a vertical clearance of about 136 feet above mean high water to allow passage of marine traffic. The plan for rehabilitation includes replacement of the counterweight cables, counterweight trunion bearings, electrical control system and main switchboard; repair or replacement of steel members; and cleaning and painting of the steel superstructure. All work is programmed.

AUTHORIZATION: The existing Cape Cod Canal project is authorized by the Rivers and Harbors Act of 1935. Authorization to construct three bridges, two vehicular and one railroad, was included in the Public Works Administration Program of 1933.

REMAINING BENEFIT-REMAINING COST RATIO: 5.3 to 1 at 7 1/8 percent.

TOTAL BENEFIT-COST RATIO: 4.6 to 1 at 7 1/8 percent.

INITIAL BENEFIT-COST RATIO: 4.6 to 1 at 7 1/8 percent (FY 2000).

BASIS OF BENEFIT-COST RATIO: Benefits are based on a supplemental economic analysis to the Major Rehabilitation Report, Vertical Lift Railroad Bridge, Cape Cod Canal, Massachusetts, dated May 1997 at April 1997 price levels.

SUMMARIZED FINANCIAL DATA	ACCUMULATED PCT. OF EST. FED COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$31,200,000	Phase I	30	October 2002
Estimated Non-Federal Cost	0	Phase II	0	March 2004
Total Estimated Project Cost	\$31,200,000 <u>1/</u>	Entire Project	15	March 2004

1/ Excludes \$300,000 in design funded by Operations & Maintenance Appropriation.

Division: North Atlantic

District: New England

Cape Cod Canal Railroad Bridge, MA

SUMMARIZED FINANCIAL DATA (Continued)		ACCUMULATED PCT OF EST FED COST	PHYSICAL DATA
Allocations to 30 September 2001	\$ 5,575,000		<u>Phase I</u>
Conference Allowance for FY 2002	12,500,000		Repair or replace steel members.
Allocation for FY 2002	7,200,000 <u>1/</u>		Clean and paint steel superstructure.
Allocations through FY 2002	12,775,000	41	<u>Phase II</u>
Allocation Requested for FY 2003	8,500,000	68	Replace counterweight cables and trunion bearings.
Programmed Balance to Complete			Replace electrical control system and main switchboard.
After FY 2003	9,925,000		
Unprogrammed Balance to Complete			
After FY 2003	0		

1/ Reflects \$1,998,000 reduction assigned as savings and slippage, and \$3,302,000 reprogrammed from the project.

JUSTIFICATION: The railroad bridge is a critical link connecting Cape Cod with the mainland of southeastern Massachusetts. The bridge is used primarily for waste removal with an average of four crossings per day, six days a week. Waste removal is extremely important as there are no refuse disposal facilities on Cape Cod and train service is the most economical method of transport. During the tourist season, the bridge is also used by passenger trains with service from New York. An inspection and condition report performed in 1984 revealed the need for major rehabilitation of the bridge to ensure reliable operation of the structure. An August 1995 inspection confirmed the critical need for rehabilitation work to arrest further deterioration and possible bridge replacement. Federal interest in the major rehabilitation of the Cape Cod Canal Railroad Bridge is contained in Article 16 of the 1935 Agreement with the railroad which states "It is understood and agreed that the Government shall sustain the obligation of the operation, maintenance, renewals and repairs of said new railroad bridge...". Failure of the bridge in the down position would close the canal to marine traffic for up to a year. Marine traffic would need to be rerouted around Cape Cod greatly increasing shipping costs and reducing navigational safety. Average annual benefits for the major rehabilitation project are \$51,000,000 at April 1997 prices.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Complete Phase I of Construction	\$ 3,720,000
Initiate Phase II of Construction	3,480,000
Planning, Engineering and Design	100,000
Construction Management	1,200,000
Total	\$ 8,500,000

Division: North Atlantic

District: New England

Cape Cod Canal Railroad Bridge, MA

NON-FEDERAL COSTS: None Required.

STATUS OF LOCAL COOPERATION: None Required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$31,200,000 is a decrease of \$600,000 from the latest estimate (\$31,800,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	\$ 820,000
Post Contract Award and Other Estimating Adjustments	-1,420,000
Total	\$ -600,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment and Finding of No Significant Impact were completed in May 1997.

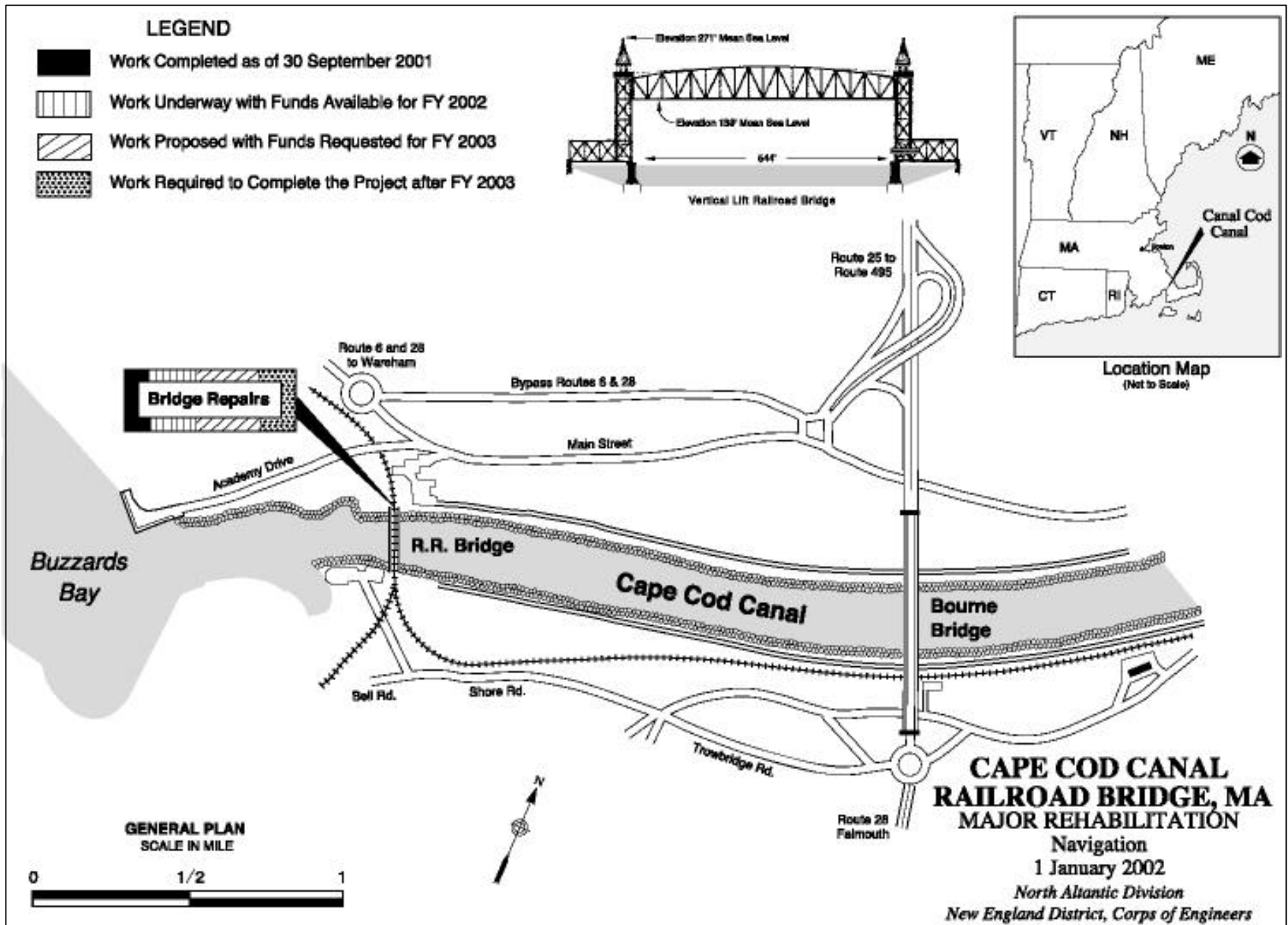
OTHER INFORMATION: Preconstruction Engineering and Design (PED) efforts were initiated in Fiscal Year 1999 using Operation and Maintenance Appropriation funds. Funds to initiate construction were appropriated in FY 2000.

Division: North Atlantic

District: New England

Cape Cod Canal Railroad Bridge, MA





APPROPRIATION TITLE: Construction, General - Dam Safety Assurance - Flood Control

PROJECT: West Hill Dam, Massachusetts (Continuing)

LOCATION: West Hill Dam is located in the town of Uxbridge in south central Massachusetts, about 14 miles southeast of Worcester, Massachusetts. The dam site is located along the West River about 3 miles above its confluence with the Blackstone River.

DESCRIPTION: West Hill Dam was constructed in 1961 as a single-purpose flood control project. The main dam is composed of an earth filled embankment with rock slope protection, 2,400 feet in length, with a maximum height of 48 feet above the riverbed. The project includes four small dikes totaling 1,300 feet in length. Storage capacity of the reservoir is 12,440 acre-feet at spillway crest, pool stage of 30 feet. The project has prevented \$30 million in damages to date. Proposed rehabilitation work involves the construction of a concrete panel cut-off wall along 2,160 feet of the main dam embankment and foundation to provide seepage control.

AUTHORIZATION: Flood Control Act of 1944.

REMAINING BENEFIT-REMAINING COST RATIO: 3.7 to 1 at 6 7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 6 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 6 7/8 percent (FY 2001).

BASIS OF BENEFIT-COST RATIO: Benefits are based on the economic analysis to the Dam Safety Assurance Report, West Hill Dam, Massachusetts, dated May 1999 at March 1999 price levels.

SUMMARIZED FINANCIAL DATA	ACCUMULATED PCT. OF EST. FED COST	STATUS (1 Jan 2002)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	\$14,600,000	Entire Project	20	September 2003
Estimated Non-Federal Cost	0			
Total Estimated Project Cost	\$14,600,000 <u>1/</u>			

1/ Excludes \$430,000 in design funded by Operations & Maintenance Appropriation.

Division: North Atlantic

District: New England

West Hill Dam, MA

SUMMARIZED FINANCIAL DATA (Continued)		ACCUMULATED PCT. OF EST. FED COST	PHYSICAL DATA
Allocations to 30 September 2001	\$ 2,500,000		Construct 2,160 feet of concrete cutoff wall along dam embankment and foundation.
Conference Allowance for FY 2002	9,000,000		
Allocation for FY 2002	9,300,000 <u>1/</u>		
Allocations through FY 2002	11,800,000	81	
Allocation Requested for FY 2003	\$ 2,800,000	100	
Programmed Balance to Complete			
After FY 2003	0		
Unprogrammed Balance to Complete			
After FY 2003	0		

1/ Reflects \$1,438,000 reduction assigned as savings and slippage, and \$1,738,000 reprogrammed to the project.

JUSTIFICATION: West Hill Dam was constructed of available, on-site random and impervious fill, with a limited upstream impervious blanket and no significant foundation seepage control features. During each of the last five flood storage events, the main dam embankment has experienced seepage problems. One of the most recent events occurred in March 1998, when storage of only 13.5 feet of water, which is less than 20 percent of the dam's design capacity, caused boils and piping of foundation materials downstream of the dam. Reservoir regulation procedures have been modified to keep pool levels below 15 feet during minor to moderate floods. Seepage and boil activity is occurring at lower pool levels, indicating that the problem is worsening and raising concerns that there is a real risk of dam failure at high pool stages. Five new boils developed during the March 2001 flood event with storage of 16.9 feet. Catastrophic failure of the dam would cause extensive property damage and place over 10,000 people at risk in the densely populated downstream communities. Average annual benefits for dam safety modifications are \$1.1 million at March 1999 prices.

FISCAL YEAR 2003: The requested amount will be applied as follows:

Complete Construction	\$2,400,000
Planning, Engineering and Design	100,000
Construction Management	300,000
 Total	 \$2,800,000

NON-FEDERAL COSTS: None Required.

STATUS OF LOCAL COOPERATION: None Required.

Division: North Atlantic

District: New England

West Hill Dam, MA

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$14,600,000 is an increase of \$1,400,000 from the latest estimate (\$13,200,000) presented to Congress (FY 2002). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	-\$ 200,000
Post Contract Award and Other Estimating Adjustments	1,600,000
Total	\$ 1,400,000

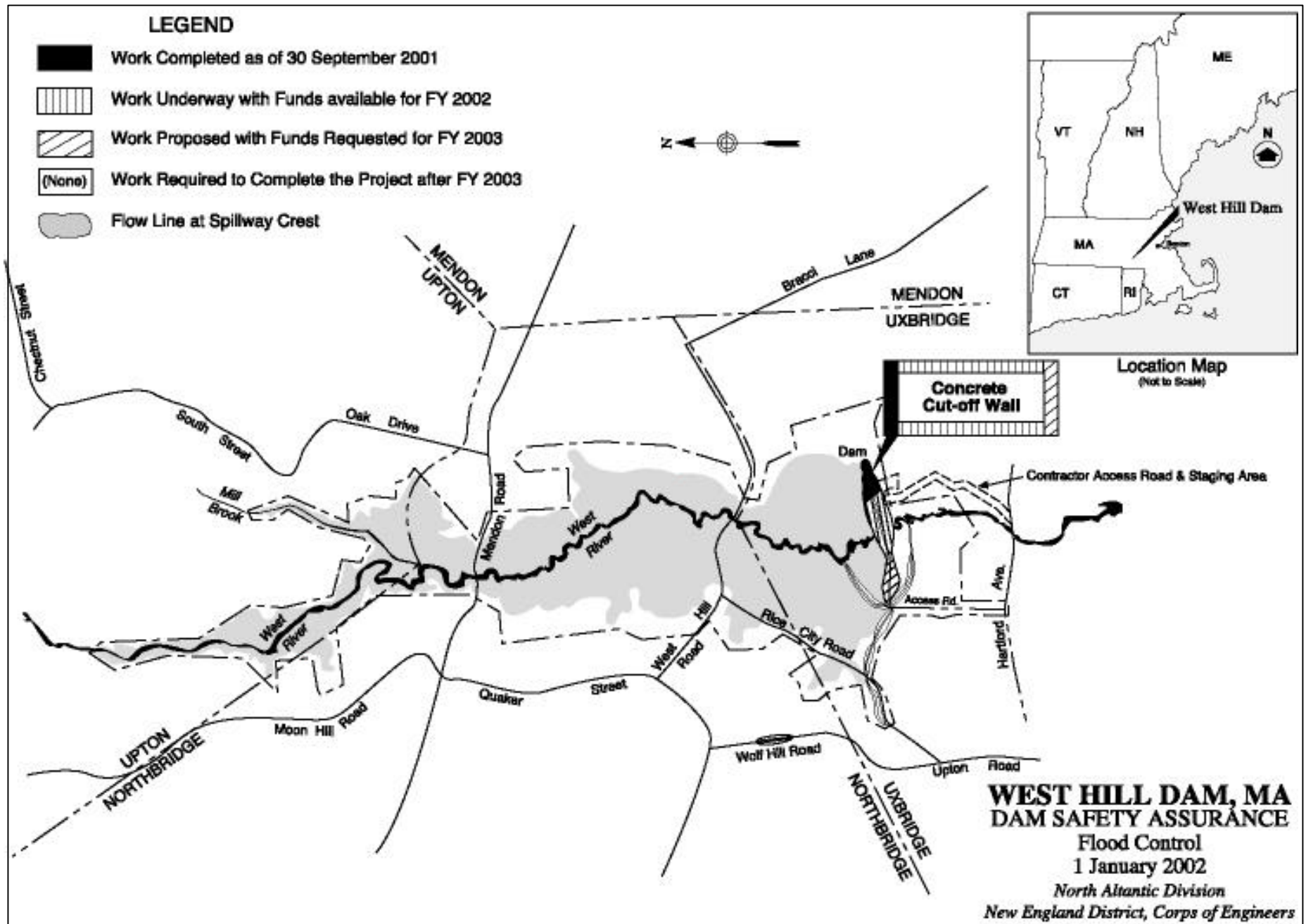
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment and Finding of No Significant Impact were completed in May 1999.

OTHER INFORMATION: Preconstruction Engineering and Design (PED) efforts were completed in December 2000 with Operation and Maintenance Appropriation funds. Funds to initiate construction were appropriated in Fiscal Year 2001.

Division: North Atlantic

District: New England

West Hill Dam, MA



**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY 2003

**1. Navigation**

**a. Channels and Harbors**

The budget estimate of \$ **144,664,000** provides for essential operation and maintenance work on 71 channel and harbor projects named in the list which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and dredged material disposal areas, snagging and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects.

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2002 (\$)	FY 2003 (\$)	
Project Name	Total	Total	1. Reason for change in Operations from FY 2002 to FY 2003 (10% +/-)
	(Operations)	(Operations)	2. Major Maintenance items budgeted in FY 2002
	(Maintenance)	(Maintenance)	(Threshold \$ 1,000,000)
<b>Connecticut</b>			
New Haven Harbor	0	4,546,000	
	(0)	(0)	1. None.
	(0)	(4,546,000)	2. Dredge navigation channel.
<b>Delaware</b>			
IWW, from Delaware River	15,858,000	12,853,000	
to Chesapeake Bay,	(2,835,000)	(2,673,000)	1. None.
DE & MD	(13,023,000)	(10,180,000)	2. Dredge navigation channel.
IWW Rehoboth Bay to	1,111,000	45,000	
Delaware Bay	(41,000)	(45,000)	1. None.
	(1,070,000)	(0)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2002 (\$)	FY 2003 (\$)	
Project Name	Total	Total	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Delaware (Cont'd)</b>			
Mispillion River	120,000	275,000	
	(0)	(0)	1. None.
	(120,000)	(275,000)	2. None.
Murderkill River	120,000	310,000	
	(0)	(0)	1. None.
	(120,000)	(310,000)	2. None.
Wilmington Harbor	5,265,000	4,966,000	
	(265,000)	(65,000)	1. Complete Dredged Material Management Plan study in FY 2002.
	(5,000,000)	(4,901,000)	2. Dredge navigation channel and repair disposal area dikes.
<b>District of Columbia</b>			
Washington Harbor	50,000	50,000	
	(0)	(0)	1. None.
	(50,000)	(50,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
Project Name	FY 2002 (\$)	FY 2003 (\$)	
	Total	Total	
	(Operations) (Maintenance)	(Operations) (Maintenance)	
Maine			
Belfast Harbor	60,000	1,305,000	1. None. 2. Dredge navigation channel.
	(0)	(0)	
	(60,000)	(1,305,000)	
Rockland Harbor	55,000)	1,110,000	1. None. 2. Dredge navigation channel.
	(0)	(0)	
	(55,000)	(1,110,000)	
Maryland			
Baltimore Harbor and Channels	12,035,000	18,444,000	1. Contracts for Dredge Material testing and Dredge Material Management study. 2. Dredge navigation channel.
	(1,678,000)	(2,697,000)	
	(10,357,000)	(15,747,000)	
Honga River and Tar Bay	289,000	930,000	1. None. 2. None.
	(0)	(0)	
	(289,000)	(930,000)	



**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003(Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Maryland</b> (Cont'd)			
Ocean City Harbor and Inlet	2,686,000	1,627,000	
and Sinepuxent Bay	(0)	(0)	1. None.
	(2,686,000)	(1,627,000)	2. Repair to the south jetty in FY 2002/2003, and dredge navigation channel.
Pocomoke River	50,000	619,000	
	(0)	(0)	1. None.
	(50,000)	(619,000)	2. None.
Tolchester Channel	9,430,000	180,000	
	(0)	(0)	1. None.
	(9,430,000)	(180,000)	2. None.
Wicomico River	648,000	604,000	
	(0)	(0)	1. None.
	(648,000)	(604,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Massachusetts</b>			
Aunt Lydia's Cove	288,000	418,000	
	(0)	(0)	1. None.
	(288,000)	(418,000)	2. None.
Cape Cod Canal	9,566,000	7,659,000	
	(4,350,000)	(4,126,000)	1. None.
	(5,216,000)	(3,533,000)	2. Roadway pavement/waterproofing of the Bourne Bridge.
Cuttyhunk Harbor	0	174,000	
	(0)	(0)	1. None.
	(0)	(174,000)	2. None.
Green Harbor	363,000	418,000	
	(0)	(0)	1. None.
	(363,000)	(418,000)	2. None.
Plymouth Harbor	500,000	1,000,000	
	(0)	(0)	1. None.
	(500,000)	(1,000,000)	2. Reconstruct damaged portions of dike FY 02/03

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Massachusetts</b> (Cont'd)			
Scituate Harbor	1,440,000	2,950,000	
	(0)	(0)	1. None.
	(1,440,000)	(2,950,000)	2. Breakwater repair in FY 2003.
<b>New Hampshire</b>			
Cocheco River	288,000	50,000	
	(0)	(0)	1. None.
	(288,000)	(50,000)	2. None.
Little Harbor	70,000	200,000	
	(70,000)	(200,000)	1. Monitor mitigation measures.
	(0)	(0)	2. None.
<b>New Jersey</b>			
Barnegat Inlet	3,087,000	1,750,000	
	(0)	(0)	1. None.
	(3,087,000)	(1,750,000)	2. Dredge navigation channel.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>New Jersey</b> (Cont'd)			
Cold Spring Inlet	395,000	425,000	
	(0)	(0)	1. None.
	(395,000)	(425,000)	2. None.
Delaware River at Camden	18,000	20,000	
	(18,000)	(20,000)	1. None.
	(0)	(0)	2. None.
Delaware River, Philadelphia to the Sea, PA, NJ and DE	17,501,000	19,245,000	
	(1,450,000)	(1,350,000)	1. None.
	(16,051,000)	(17,895,000)	2. Dredge navigation channel.
Delaware River, Philadelphia to Trenton, NJ	1,487,000	3,470,000	
	(390,000)	(400,000)	1. None.
	(1,097,000)	(3,070,000)	2. Dredge navigation channel.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<hr/>			
<b>New Jersey</b> (Cont'd)			
New Jersey Intracoastal Waterway	1,518,000 (450,000) (1,068,000)	2,586,000 (490,000) (2,096,000)	1. None. 2. Dredge navigation channel.
Newark Bay, Hackensack, & Passaic Rivers	2,784,000 (0) (2,784,000)	75,000 (0) (75,000)	1. None. 2. None.
Raritan River	0 (0) (0)	80,000 (0) (80,000)	1. None. 2. None.
Shark River	96,000 (0) (96,000)	590,000 (0) (590,000)	1. None. 2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>New York</b>			
Buttermilk Channel	0	300,000	
	(0)	(0)	1. None.
	(0)	(300,000)	2. None.
East River	1,076,000	80,000	
	(0)	(0)	1. None.
	(1,076,000)	(80,000)	2. None.
East Rockaway Inlet	140,000	2,100,000	
	(0)	(0)	1. None.
	(140,000)	(2,100,000)	2. Dredge navigation channel FY 2002/2003.
Fire Island Inlet to Jones Inlet	3,908,000	175,000	
	(0)	(0)	1. None.
	(3,908,000)	(175,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>New York</b> (Cont'd)			
Flushing Bay and Creek	3,840,000	80,000	
	(0)	(0)	1. None.
	(3,840,000)	(80,000)	2. None.
Glen Cove Creek	500,000	80,000	
	(0)	(0)	1. None.
	(500,000)	(80,000)	2. None.
Great South Bay	96,000	80,000	
	(0)	(0)	1. None.
	(96,000)	(80,000)	2. None.
Hudson River Channel	0	80,000	
	(0)	(0)	1. None.
	(0)	(80,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>New York</b> (Cont'd)			
Hudson River	1,674,000	2,245,000	
(Maintenance)	(410,000)	(450,000)	1. None.
	(1,264,000)	(1,795,000)	2. Dredge navigation channel FY 2003/2004
Hudson River	1,284,000	3,170,000	
(O&C)	(966,000)	(1,030,000)	1. None.
	(318,000)	(2,140,000)	2. Repair Cracks in Troy Dam's Main/Auxiliary Spillways.
Jamaica Bay	140,000	1,420,000	
	(0)	(0)	1. None.
	(140,000)	(1,420,000)	2. Dredge navigation channel FY 2002/2003.
Jones Inlet	96,000	100,000	
	(0)	(0)	1. None.
	(96,000)	(100,000)	2. None.
Lake Montauk Harbor	27,000	80,000	
	(0)	(0)	1. None.
	(27,000)	(80,000)	2. None.



**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>New York</b> (Cont'd)			
Long Island Intra-Coastal	2,168,000	1,284,000	
Waterway	(0)	(0)	1. None
	(2,168,000)	(1,284,000)	2. Dredge navigation channel.
Mattituck Harbor	0	80,000	
	(0)	(0)	1. None.
	(0)	(80,000)	2. None.
Moriches Inlet	77,000	600,000	
	(0)	(0)	1. None.
	(77,000)	(600,000)	2. None.
New York and New Jersey	355,000	3,835,000	
Channels	(0)	(0)	1. None.
	(355,000)	(3,835,000)	2. Dredge navigation channels FY 2002/2003.
New York Harbor	4,340,000	3,720,000	
	(1,255,000)	(1,620,000)	1. Variation in environmental/monitoring studies.
	(3,085,000)	(2,100,000)	2. Dredge navigation channel.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>New York</b> (Cont'd)			
Plattsburgh Harbor	1,920,000	590,000	
	(0)	(0)	1. None.
	(1,920,000)	(590,000)	2. None.
Sag Harbor	1,368,000	2,500,000	
	(0)	(0)	1. None.
	(1,368,000)	(2,500,000)	2. Repair breakwater FY 2002/2003.
Shinnecock Inlet	396,000	1,346,000	
	(0)	(0)	1. None.
	396,000)	(1,346,000)	2. Repair jetty; dredge navigation channel.
<b>Pennsylvania</b>			
Schuylkill River	75,000	50,000	
	(50,000)	(50,000)	1. None.
	(25,000)	(0)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Rhode Island</b>			
Harbor of Refuge,	0	502,000	
Block Island	(0)	(0)	1. None.
	(0)	(502,000)	2. None.
Providence River & Harbor	2,505,000	8,220,000	
	(0)	(0)	1. None.
	(2,505,000)	(8,220,000)	2. Dredging navigation channel.
<b>Vermont</b>			
Burlington Harbor	2,203,000	2,150,000	
	(0)	(0)	1. None.
	(2,203,000)	(2,150,000)	2. Repair breakwater.
Narrows of Lake Champlain	457,000	95,000	
	(60,000)	(60,000)	1. None.
	(397,000)	(35,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Virginia</b>			
Atlantic Intracoastal	1,723,000	2,035,000	
Waterway (ACC)	(1,723,000)	(1,975,000)	1. Provide for bridge, road, lock and spillway operation.
	(0)	(60,000)	2. None.
Atlantic Intracoastal	802,000	1,159,000	
Waterway (DSC)	(802,000)	(919,000)	1. Provide for lock and spillway operation.
	(0)	(240,000)	2. None.
Chincoteague Harbor of	0	155,000	
Refuge	(0)	(0)	1. None.
	(0)	(155,000)	2. None.
Chincoteague Inlet	862,000	1,124,000	
	(40,000)	(40,000)	1. None.
	(822,000)	(1,084,000)	2. Dredge navigation channel.
Davis Creek	0	350,000	
	(0)	(0)	1. None.
	(0)	(350,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Virginia</b> (Cont'd)			
Horn Harbor	0	270,000	
	(0)	(0)	1. None.
	(0)	(270,000)	2. None.
James River Channel	3,533,000	3,801,000	
	(295,000)	(300,000)	1. None.
	(3,238,000)	(3,501,000)	2. Dredge navigation channel.
Lynnhaven Inlet	879,000	225,000	
	(0)	(225,000)	1. Investigate historic ship wreck.
	(879,000)	(0)	2. None.
Norfolk Harbor	6,182,000	8,679,000	
	(445,000)	(570,000)	1. Perform channel surveys.
	(5,737,000)	(8,109,000)	2. Dredge navigation channel, continue raising dikes and levees, installation of strip drains at Craney Island.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Virginia</b> (Cont'd)			
Quinby Creek	0	400,000	
	(0)	(0)	1. None.
	(0)	(400,000)	2. None.
Rudee Inlet	1,011,000	1,030,000	
	(0)	(0)	1. None.
	(1,011,000)	(1,030,000)	2. Dredge navigation channel.
Waterway on the Coast of Virginia	742,000	1,150,000	
	(120,000)	(190,000)	1. Perform channel surveys.
	(622,000)	(960,000)	2. None.
Whitings Creek	0	350,000	
	(0)	(0)	1. None.
	(0)	(350,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**1. Navigation** (Cont'd)

**a. Channels and Harbors** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<hr/>			
Other Projects	10,865,000	0	
Maintained Periodically	(1,021,000)	(0)	
	(9,844,000)	(0)	
<b>Total-Channels &amp; Harbors</b>	<b>142,422,000</b>	<b>144,664,000</b>	
	<b>(18,734,000)</b>	<b>(19,495,000)</b>	
	<b>(123,688,000)</b>	<b>(125,169,000)</b>	
<b>b. Locks and Dams:</b>	<b>NONE</b>		
<b>TOTAL NAVIGATION</b>	<b>142,422,000</b>	<b>144,664,000</b>	
	<b>(18,734,000)</b>	<b>(19,495,000)</b>	
	<b>(123,688,000)</b>	<b>(125,169,000)</b>	

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control**

**a. Reservoirs**

The budget estimate of **\$38,049,000** provides for the operation of **51** flood control reservoirs. Requirements include: operation and ordinary maintenance of project facilities, labor, supplies, materials, and parts for day-to-day functioning; periodic maintenance, repairs and replacements; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2002 (\$)	FY 2003 (\$)	
Project Name	Total	Total	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Connecticut</b>			
Black Rock Lake	645,000	364,000	
	(266,000)	(309,000)	1. Radio network costs incorrectly coded as maintenance in previous years.
	(379,000)	(55,000)	2. None.
Colebrook River Lake	504,000	506,000	
	(393,000)	(403,000)	1. None.
	(111,000)	(103,000)	2. None.
Hancock Brook Lake	212,000	284,000	
	(175,000)	(207,000)	1. Variation in equipment.
	(37,000)	(77,000)	2. None.
Hop Brook Lake	990,000	906,000	
	(660,000)	(662,000)	1. None.
	(330,000)	(244,000)	2. None.



**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**a. Reservoirs** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Connecticut</b> (Cont'd)			
Mansfield Hollow Lake	465,000	447,000	
	(300,000)	(302,000)	1. None.
	(165,000)	(145,000)	2. None.
Northfield Brook Lake	282,000	337,000	
	(240,000)	(264,000)	1. None.
	(42,000)	(73,000)	2. None.
Thomaston Dam	505,000	565,000	
	(411,000)	(463,000)	1. Radio network cost incorrectly coded as maintenance in previous years.
	(94,000)	(102,000)	2. None.
West Thompson Lake	822,000	506,000	
	(315,000)	(349,000)	1. Radio network cost incorrectly coded as maintenance in previous years.
	(507,000)	(157,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**a. Reservoirs** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Maryland</b>			
Jennings Randolph Lake	2,562,000	1,653,000	
	(1,371,000)	(1,461,000)	1. None.
	(1,191,000)	(192,000)	2. None.
<b>Massachusetts</b>			
Barre Falls Dam	493,000	533,000	
	(360,000)	(436,000)	1. Seepage analysis for dike No. 3 in FY 2003.
	(133,000)	(97,000)	2. None.
Birch Hill Dam	511,000	498,000	
	(399,000)	(415,000)	1. None.
	(112,000)	(83,000)	2. None.
Buffumville Lake	680,000	431,000	
	(241,000)	(290,000)	1. Radio network cost incorrectly coded as
			maintenance in previous years.
	(439,000)	(141,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**a. Reservoirs** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<hr/>			
<b>Massachusetts</b> (Cont'd)			
Charles River Natural Valley Storage Area	232,000 (164,000)  (68,000)	260,000 (220,000)  (40,000)	1. Increased cost of environmental compliance management. 2. None.
Conant Brook Lake	164,000 (97,000)  (67,000)	174,000 (110,000)  (64,000)	1. Realignment of Operations and Maintenance more accurately to reflect actual work. 2. None.
East Brimfield Lake	312,000 (209,000)  (103,000)	313,000 (230,000)  (83,000)	1. Radio network cost incorrectly coded as maintenance in previous years. 2. None.
Hodges Village Dam	404,000 (247,000)  (157,000)	416,000 (282,000)  (134,000)	1. Radio network cost incorrectly coded as maintenance in previous years. 2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**a. Reservoirs** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Massachusetts</b> (Cont'd)			
Knightville Dam	722,000	483,000	
	(338,000)	(387,000)	1. Radio network cost incorrectly coded as maintenance in previous years, and perform bridge inspection in FY 2003.
	(384,000)	(96,000)	2. None.
Littleville Lake	515,000	441,000	
	(452,000)	(379,000)	1. Seepage analysis performed in FY 2002.
	(63,000)	(62,000)	2. None.
Tully Lake	546,000	486,000	
	(435,000)	(362,000)	1. Periodic inspection and report in FY 2002.
	(111,000)	(124,000)	2. None.
West Hill Dam	593,000	657,000	
	(374,000)	(419,000)	1. Radio network cost incorrectly coded as maintenance in previous years.
	(219,000)	(238,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**a. Reservoirs** (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2002 (\$)	FY 2003 (\$)	
Project Name	Total	Total	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Massachusetts</b> (Cont'd)			
Westville Lake	422,000	406,000	
	(259,000)	(279,000)	1. None.
	(163,000)	(127,000)	2. None.
<b>New Hampshire</b>			
Blackwater Dam	743,000	454,000	
	(330,000)	(367,000)	1. Radio network cost incorrectly coded as maintenance in previous years.
	(413,000)	(87,000)	2. None.
Edward MacDowell Lake	457,000	490,000	
	(381,000)	(399,000)	1. None.
	(76,000)	(91,000)	2. None.
Franklin Falls Dam	760,000	496,000	
	(364,000)	(395,000)	1. None.
	(396,000)	(101,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**a. Reservoirs** (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2002 (\$)	FY 2003 (\$)	
Project Name	Total	Total	
	(Operations) (Maintenance)	(Operations) (Maintenance)	
New Hampshire (Cont'd)			
Hopkinton-Everett Lakes	1,393,000 (975,000) (418,000)	1,074,000 (875,000) (199,000)	1. General design review in FY 2002. 2. None.
Otter Brook Lake	788,000 (598,000) (190,000)	577,000 (385,000) (192,000)	1. Spillway design review in FY 2002. 2. None.
Surry Mountain Lake	777,000 (374,000) (403,000)	575,000 (352,000) (223,000)	1. None. 2. None.
New York			
Almond Lake	444,000 (403,000) (41,000)	457,000 (416,000) (41,000)	1. None. 2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**a. Reservoirs** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>New York</b> (Cont'd)			
Arkport Dam	242,000	246,000	
	(220,000)	(223,000)	1. None.
	(22,000)	(23,000)	2. None.
East Sidney Lake	528,000	501,000	
	(392,000)	(401,000)	1. None.
	(136,000)	(100,000)	2. None.
Whitney Point Lake	579,000	705,000	
	(439,000)	(451,000)	1. None.
	(140,000)	(254,000)	2. None.
<b>Pennsylvania</b>			
Alvin R. Bush Dam	597,000	630,000	
	(479,000)	(509,000)	1. None.
	(118,000)	(121,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**a. Reservoirs** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Pennsylvania</b> (Cont'd)			
Aylesworth Creek Lake	220,000	270,000	
	(199,000)	(248,000)	1. Perform periodic inspections in FY 03.
	(21,000)	(22,000)	2. None.
Beltzville Lake	1,434,000	1,171,000	
	(1,075,000)	(1,151,000)	1. None.
	(359,000)	(20,000)	2. None.
Blue Marsh Lake	2,493,000	2,513,000	
	(2,474,000)	(2,491,000)	1. None.
	(19,000)	(22,000)	2. None.
Cowanesque Lake	1,850,000	1,915,000	
	(1,224,000)	(1,315,000)	1. None.
	(626,000)	(600,000)	2. None.



**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**a. Reservoirs** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Pennsylvania</b> (Cont'd)			
Curwensville Lake	687,000	722,000	
	(528,000)	(598,000)	1. Perform periodic inspections in FY 03.
	(159,000)	(124,000)	2. None.
Foster Joseph Sayers Dam	738,000	775,000	
	(585,000)	(657,000)	1. Perform periodic inspections in FY 03.
	(153,000)	(118,000)	2. None.
Francis E. Walter Dam	1,070,000	782,000	
	(775,000)	(767,000)	1. None.
	(295,000)	(15,000)	2. None.
General Edgar Jadwin Dam and Reservoir	324,000	341,000	
	(324,000)	(341,000)	1. None.
	(0)	(0)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**a. Reservoirs** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Pennsylvania</b> (Cont'd)			
Prompton Lake	517,000	506,000	
	(512,000)	(501,000)	1. None.
	(5,000)	(5,000)	2. None.
Raystown Lake	3,791,000	3,941,000	
	(2,238,000)	(2,404,000)	1. None.
	(1,553,000)	(1,537,000)	2. Funding for recreational facility maintenance.
Stillwater Lake	336,000	392,000	
	(292,000)	(347,000)	1. Perform periodic inspections in FY 03.
	(44,000)	(45,000)	2. None.
Tioga-Hammond Lakes	2,871,000	2,542,000	
	(1,597,000)	(1,716,000)	1. None.
	(1,274,000)	(826,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**a. Reservoirs** (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2002 (\$)	FY 2003 (\$)	
Project Name	Total	Total	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Pennsylvania</b> (Cont'd)			
York Indian Rock Dam	525,000	543,000	
	(465,000)	(481,000)	1. None.
	(60,000)	(62,000)	2. None.
<b>Vermont</b>			
Ball Mountain Lake	940,000	705,000	
	(497,000)	(404,000)	1. Emergency boring contract in FY 2002.
	(443,000)	(301,000)	2. None.
North Hartland Lake	614,000	576,000	
	(312,000)	(345,000)	1. Radio network cost incorrectly coded as maintenance in previous years.
	(302,000)	(231,000)	2. None.
North Springfield Lake	801,000	647,000	
	(483,000)	(408,000)	1. Periodic inspection and report in FY 2002.
	(318,000)	(239,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**a. Reservoirs** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Vermont</b> (Cont'd)			
Townshend Lake	678,000	687,000	
	(515,000)	(411,000)	1. Periodic inspection and report in FY 2002.
	(163,000)	(276,000)	2. None.
Union Village Dam	630,000	538,000	
	(306,000)	(341,000)	1. Radio network cost incorrectly coded as
			maintenance in previous years.
	(324,000)	(197,000)	2. None.
<b>Virginia</b>			
Gathright Dam and	1,523,000	1,612,000	
Lake Moomaw	(946,000)	(965,000)	1. None.
	(577,000)	(647,000)	2. None.
<b>Total reservoirs</b>	<b>41,931,000</b>	<b>38,049,000</b>	
	<b>(28,008,000)</b>	<b>(28,893,000)</b>	
	<b>(13,923,000)</b>	<b>(9,156,000)</b>	

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**a. Reservoirs** (Cont'd)

**Scheduling Reservoir Operations**

The **\$151,000** requested in FY 2003 supports preparation, review and updating of water control manuals, real-time data collection to monitor hydrologic conditions, and the issuance of gate regulation instructions as necessary at **2** non-Corps dam and reservoir projects at which the Corps is responsible for flood control or navigation.

STATE  Project Name	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2002 (\$) Total (Operations) (Maintenance)	FY 2003 (\$) Total (Operations) (Maintenance)	
Maryland	82,000 (82,000) (0)	91,000 (91,000) (0)	1. Savings and Slippages in FY 2002. 2. None.
Pennsylvania	54,000 (54,000) (0)	60,000 (60,000) (0)	1. Savings and Slippages in FY 2002. 2. None.
<b>Total Scheduling of Reservoir Operations</b>	<b>136,000 (136,000) (0)</b>	<b>151,000 (151,000) (0)</b>	
<b>Total Reservoirs and Scheduling of Reservoir Operations</b>	<b>42,067,000 (28,144,000) (13,923,000)</b>	<b>38,200,000 (29,044,000) (9,156,000)</b>	

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**b. Channel Improvements**

The budget estimate of **\$2,024,000** provides for the essential annual requirement of **5** local flood protection projects, including **10** separate units of the Southern New York projects.

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2002 (\$)	FY 2003 (\$)	
Project Name	Total	Total	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Connecticut</b>			
Stamford Hurricane Barrier	366,000	349,000	
	(250,000)	(275,000)	1. None.
	(116,000)	(74,000)	2. None.
<b>Maryland</b>			
Cumberland, MD and	151,000	168,000	
Ridgeley, WV	(151,000)	(168,000)	1. Savings and Slippages in FY 2002.
	(0)	(0)	2. None.
<b>Massachusetts</b>			
New Bedford, Fairhaven &	344,000	322,000	
Acushnet Hurricane Barrier	(131,000)	(144,000)	1. None.
	(213,000)	(178,000)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**b. Channel Improvements** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>New Jersey</b>			
Passaic River Flood	408,000	425,000	
Flood Warning System	(408,000)	(425,000)	1. None.
	(0)	(0)	2. None.
<b>New York</b>			
Southern New York	681,000	760,000	
Projects	(245,000)	(230,000)	1. None.
	(436,000)	(530,000)	2. None.
<b>Total Channel</b>	<b>1,950,000</b>	<b>2,024,000</b>	
<b>Improvements</b>	<b>(1,185,000)</b>	<b>(1,242,000)</b>	
	<b>(765,000)</b>	<b>(782,000)</b>	

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**b. Channel Improvements** (Cont'd)

**Inspection of Completed Works and Miscellaneous Maintenance**

The \$ 941,000 requested in FY 2003 supports inspections at flood control projects constructed by the Corps and operated and maintained by non-Federal interests. The inspections are conducted to determine the extent of compliance with legal standards and to advise local interests, as necessary, of corrective measures required to ensure that project structures and facilities will continue to safely provide flood protection benefits. These projects consist of features such as channels, levees, and floodwalls. drainage structures and pumping plants.

STATE  Project Name	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2002 (\$) Total (Operations) (Maintenance)	FY 2003 (\$) Total (Operations) (Maintenance)	
Connecticut	34,000 (34,000) (0)	35,000 (35,000) (0)	1. None. 2. None.
District of Columbia	6,000 (6,000) (0)	7,000 (7,000) (0)	1. None. 2. None.
Maine	14,000 (14,000) (0)	16,000 (16,000) (0)	1. Variation in inspections. 2. None.
Maryland	32,000 (32,000) (0)	34,000 (34,000) (0)	1. None. 2. None.



**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**b. Channel Improvements** (Cont'd)

**Inspection of Completed Works and Miscellaneous Maintenance** (Cont'd)

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2002 (\$)	FY 2003 (\$)	
Project Name	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
Massachusetts	93,000 (93,000) (0)	112,000 (112,000) (0)	1. Variation in inspections. 2. None.
New Hampshire	10,000 (10,000) (0)	11,000 (11,000) (0)	1. None. 2. None.
New Jersey	32,000 (32,000) (0)	65,000 (65,000) (0)	1. Increase in projects to be inspected. 2. None.
New York	195,000 (195,000) (0)	358,000 (358,000) (0)	1. Increase in projects to be inspected. 2. None.
Pennsylvania	131,000 (131,000) (0)	140,000 (140,000) (0)	1. None. 2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**2. Flood Control** (Cont'd)

**b. Channel Improvements** (Cont'd)

**Inspection of Completed Works and Miscellaneous Maintenance** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<hr/>			
Rhode Island	5,000	6,000	
	(5,000)	(6,000)	1. None.
	(0)	(0)	2. None.
Vermont	17,000	26,000	
	(17,000)	(26,000)	1. Variation in inspections.
	(0)	(0)	2. None.
Virginia	35,000	111,000	
	(35,000)	(111,000)	1. Increase in number of projects to inspect.
	(0)	(0)	2. None.
West Virginia	19,000	20,000	
	(19,000)	(20,000)	1. None.
	(0)	(0)	2. None.

NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

## 2. Flood Control (Cont'd)

### b. Channel Improvements (Cont'd)

### Inspection of Completed Works and Miscellaneous Maintenance (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	Total (Operations) (Maintenance)	Total (Operations) (Maintenance)	
<b>Total Inspection and Miscellaneous Maintenance</b>	<b>623,000 (623,000) (0)</b>	<b>941,000 (941,000) (0)</b>	
<b>Total Channel Improvements, Inspections and Miscellaneous Maintenance</b>	<b>2,573,800 (1,808,000) (765,000)</b>	<b>2,965,000 (2,183,000) (782,000)</b>	
<b>TOTAL-FLOOD CONTROL</b>	<b>44,640,000 (29,952,000) (14,688,000)</b>	<b>41,165,000 (31,227,000) (9,938,000)</b>	

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**3. Multiple Purpose Power Projects - NONE**

**4. Protection of Navigation**

The budget estimate of **\$9,723,000** provides for accomplishing the work essential to the administration and enforcement of specific laws enacted for the protection of navigation, including the prevention of obstructive and injurious deposits in the tidal waters of three major harbors; removal of drift and debris.

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2002 (\$)	FY 2003 (\$)	
Project Name	Total	Total	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	

**Prevention of Obstructive and Injurious Deposits:**

Baltimore Harbor, MD	624,000	663,000	
	(624,000)	(663,000)	1. None.
	(0)	(0)	2. None.
 New York Harbor, NY & NJ	 720,000	 750,000	
	(720,000)	(750,000)	1. None.
	(0)	(0)	2. None.
 Norfolk Harbor, VA	 206,000	 200,000	
	(206,000)	(200,000)	1. None.
	(0)	(0)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**4. Protection of Navigation (Cont'd)**

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2002 (\$)	FY 2003 (\$)	
Project Name	Total	Total	
	(Operations) (Maintenance)	(Operations) (Maintenance)	
Collection and Removal of Drift:			
Baltimore Harbor Drift	445,000	500,000	
Removal, MD	(0)	(0)	1. None.
	(445,000)	(500,000)	2. None.
New York Harbor Drift	4,868,000	5,300,000	
Removal, NY & NJ	(0)	(0)	1. Removal of hazardous drift material.
	(4,868,000)	(5,300,000)	2. None.
Removal of Drift & Debris	891,000	1,110,000	
from the Potomac and	(0)	(0)	1. None.
Anacostia River, DC	(891,000)	(1,110,000)	2. Increase in Hauling costs in FY 2003.
Hampton Roads Drift	1,051,000	1,200,000	
Removal, VA	(0)	(0)	1. None.
	(1,051,000)	(1,200,000)	2. Repair of boats used to locate and remove drift.
Total Protection of	8,805,000	9,723,000	
Navigation	(1,550,000)	(1,613,000)	
	(7,255,000)	(8,110,000)	

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**4. Protection of Navigation** (Cont'd)

**a. Project Condition Surveys**

The **\$10,985,000** requested in FY 2003 supports hydrographic surveys, inspections, and studies to determine the condition of navigation channels that do not have any other maintenance work included in the budget request and disseminate the information to users of the projects. For the projects that do not require maintenance, surveys are performed at many of them in order to determine the degree of sedimentation so that the users can be advised of channel conditions and future maintenance can be scheduled.

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<hr/>			
Connecticut	1,149,000	1,185,000	
	(1,149,000)	(1,185,000)	1. None.
	(0)	(0)	2. None.
Delaware	50,000	50,000	
	(50,000)	(50,000)	1. None.
	(0)	(0)	2. None.
District of Columbia	30,000	33,000	
	(30,000)	(33,000)	1. None.
	(0)	(0)	2. None.
Maine	499,000	515,000	
	(499,000)	(515,000)	1. None.
	(0)	(0)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**4. Protection of Navigation** (Cont'd)

**a. Project Condition Surveys** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<hr/>			
Maryland	300,000	323,000	
	(300,000)	(323,000)	1. None.
	(0)	(0)	2. None.
Massachusetts	1,161,000	1,197,000	
	(1,161,000)	(1,197,000)	1. None.
	(0)	(0)	2. None.
New Hampshire	265,000	273,000	
	(265,000)	(273,000)	1. None.
	(0)	(0)	2. None.
New Jersey	720,000	782,000	
	(720,000)	(782,000)	1. None.
	(0)	(0)	2. None.

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**4. Protection of Navigation** (Cont'd)

**a. Project Condition Surveys** (Cont'd)

<u>STATE</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u>	<u>FY 2003 (\$)</u>	
<u>Project Name</u>	<u>Total</u>	<u>Total</u>	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<hr/>			
New York	829,000	893,000	
	(829,000)	(893,000)	1. None.
	(0)	(0)	2. None.
Rhode Island	320,000	330,000	
	(320,000)	(330,000)	1. None.
	(0)	(0)	2. None.
Virginia	715,000	749,000	
	(715,000)	(749,000)	1. None.
	(0)	(0)	2. None.
Disposal Area Monitoring	1,085,000	1,205,000	
	(1,085,000)	(1,205,000)	1. Variation in testing cost in FY 2003.
	(0)	(0)	2. None.



**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**4. Protection of Navigation** (Cont'd)

**a. Project Condition Surveys** (Cont'd)

<u>STATE</u>  <u>Project Name</u>	<u>ESTIMATED OBLIGATIONS</u>		<u>Reason for Change and Major Maintenance Items</u>
	<u>FY 2002 (\$)</u> <u>Total</u> (Operations) (Maintenance)	<u>FY 2003 (\$)</u> <u>Total</u> (Operations) (Maintenance)	
Long Island Sound, CT and NY	1,036,000 (1,036,000) (0)	1,450,000 (1,450,000) (0)	1. Variation in sediment sampling and testing. 2. None.
Rhode Island Region Long-Term Dredge Disposal Evaluation	0 (0) (0)	2,000,000 (2,000,000) (0)	1. Earlier efforts conducted as part of Providence River study. 2. None.
<b>Total Project Condition Survey</b>	<b>8,159,000</b> <b>(8,159,000)</b> <b>(0)</b>	<b>10,985,000</b> <b>(10,985,000)</b> <b>(0)</b>	

**NORTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2003 (Cont'd)

**4. Protection of Navigation (Cont'd)**

**b. Surveillance of Northern Boundary Waters.**

The \$17,000 requested in FY 2003 supports meeting US obligations under provisions of boundary water treaties and other international agreements. Data collection includes current velocity measurements, presence and intensity of ice, water levels, land use patterns and estimating potential damages caused by extreme levels. This information can be used to enhance water level forecasts, develop crises response plans, and provide advance warning to area residents and waterway users of impending floods or ice jams.

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2002 (\$)	FY 2003 (\$)	
Project Name	Total	Total	
	(Operations)	(Operations)	
	(Maintenance)	(Maintenance)	
<b>Maine</b>			
International St. Croix	16,000	17,000	
River Board	(16,000)	(17,000)	1. None.
	(0)	(0)	2. None.
<b>Total Surveillance of</b>	<b>16,000</b>	<b>17,000</b>	
<b>Northern Boundary Waters</b>	<b>(16,000)</b>	<b>(17,000)</b>	
	(0)	(0)	
<b>Total Protect. of Navig.,</b>	<b>16,980,000</b>	<b>20,725,000</b>	
<b>Project Condition Survey</b>	<b>(9,725,000)</b>	<b>(12,615,000)</b>	
<b>&amp; Surveillance of</b>	<b>(7,255,000)</b>	<b>(8,110,000)</b>	
<b>Northern Boundary Waters</b>			
<b>GRAND TOTAL-NORTH</b>	<b>204,042,000</b>	<b>206,554,000</b>	
<b>ATLANTIC DIVISION</b>	<b>(58,411,000)</b>	<b>(63,337,000)</b>	
	<b>(145,631,000)</b>	<b>(143,217,000)</b>	